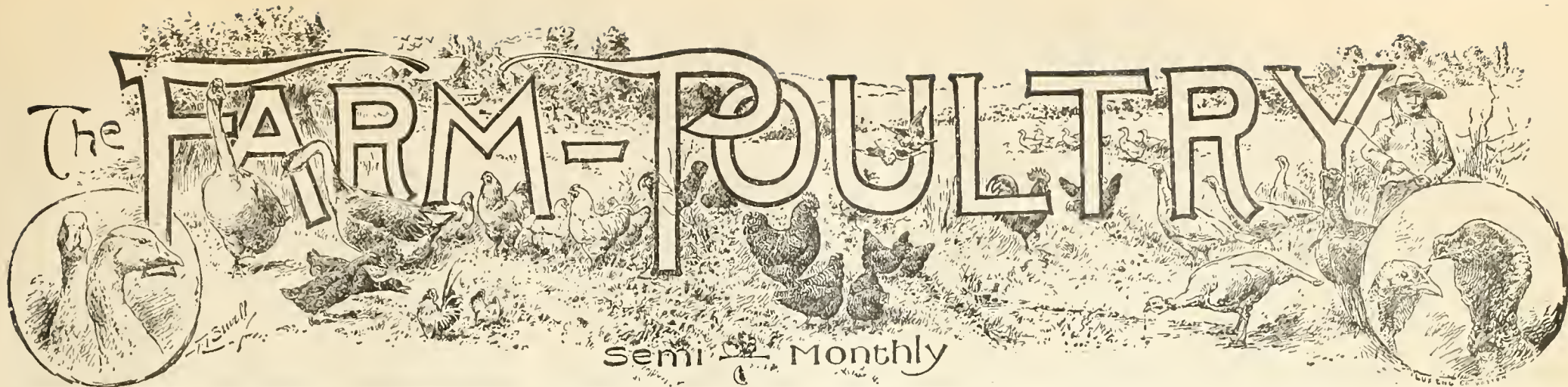


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The Economic Values of External Characteristics*

By MONS. LOUIS VANDER SNICKT, of Brussels.

BELGIUM is the cradle of breeds of poultry which are peculiarly adapted to the conditions under which they live, producing in the shortest time, and at the least cost, the maximum of what is required. Although a small country, it contains great differences of soil, of situation, and of climate. The western part of Flanders is on the wind swept seashore, while eastern Flanders and Flemish Brabant have very fertile clay soil. The eastern sections of the provinces of Antwerp and Limbourg, called the "Campines," are partly cultivated and partly arid sand. Beginning with Brabant Wallon, towards Germany and Luxemburg, the land becomes more and more elevated, rocky, and colder. Every breed of fowl, in respect of size, color of plumage, texture of feather, and other external characteristics, has adapted itself to the special situation and industry for which it has been selected.

The poultry industry is divided into two sections, that is, egg and meat production respectively, both of which are entirely different. Poor people with many children, willing to work hard on poor ground, breed hundreds, and, in some cases, thousands of "Poulets de Bruxelles." The Turkey Headed Malines fowl, which grows to a great size, can be kept in the arid sands of the "Campines" until they are five months old, when they are forwarded to the Malines market, where they are purchased by fatteners, who keep them for five or six weeks before they are killed and sent to Brussels. After the lapse of twenty years the land is transformed into some of the richest and most productive in the world, the more careful and thrifty people cease to breed poultry, and take up the profession of horticulture. On the ground which less than a generation ago all was arid sand and pine woods, they are now forming nurseries, and in ten or twenty years more that part of the Campine country will be all under glass, as at Hooylaert, a village on the other side of Brussels, where upwards of 300 acres are laid out as nurseries for the cultivation of grapes, peaches, tomatoes. Fifteen years ago I tried to utilize the non-warmed glass houses for *petits poussins* breeding. When speaking of the Braekel fowl we shall see how the external characters of that breed are suitable for winter

breeding. The Single Comb Malines are not kept more than three and a half months on the rich soil to the northwest of Brussels, before they are fattened. This breed is built up to give at that age the maximum quantity of meat.

The demand for chickens is so large that at the end of May, 1907, breeders find it to their advantage to sell their birds at eight weeks old, realizing 5s. per pair. Winter ducklings are produced on the low meadows of the Sheldt (Escaut), and also winter goslings, the latter

This is much easier work, as the birds require very little labor and attention. On all the farms where cows are kept and the crops are valuable, a limited number of hens are maintained for the sake of their eggs. Under these circumstances the farmer prefers to devote all his time and attention to field cultivation, to his horses, cows, and other stock. In some of the Flemish villages where population is very dense, the burgomaster will not permit any one to have more than ten hens except they keep them entirely on their own premises or land, in

which case they can have as many as they like. Or some of the larger farms as many as 300 hens are to be found, but it is questionable if it is not more profitable to reduce the number to less than 100. Profit in egg production is more a question of suitable breed, of waste food to be picked up, and of good management, than of number.

It must not be thought that the laying breeds are unsuitable for meat production. On the contrary, the best and most precocious layers are also the breeds which produce the finest *petits poussins* (milk chickens). These little birds, when six weeks old are 25% larger than those of the heavier breeds at the same age, and carry more meat. They also produce the highly appreciated *poulets de grains* at three months old. But if kept longer, and the cockerels have begun to crow, their flesh is very poor. The size and weight of a hen after she has commenced to lay does not determine the profit. This depends upon the quality and quantity of her eggs, which alone should be considered. The three or four pounds more that some hens will weigh than others is generally a loss rather than a profit. It is easier and cheaper to keep twenty-five small hens on an acre of ground than the same number of a larger bodied variety, and the twenty-five hens of four pounds will each lay their 150 eggs of 60 grammes as well as the twenty-five hens of eight pounds, but the eggs from the former will not have cost nearly so much, as the smaller birds are more active and capable of finding and picking up in a shorter time the necessary natural food for their own support and for their eggs. The one as well as the other can be killed only once; the difference in price for hen of eight pounds is not sufficient compensation for this additional cost.

The most productive Belgian laying breeds are the



Partridge Cochins.

attaining 7 lbs. weight. Table poultry breeding is essentially the work of poor people, who, as already mentioned, as soon as they have saved some money, and their land is sufficiently improved, give up poultry keeping. Another reason for their doing so is that in Flanders it is not possible to adopt the colony or portable house systems as in America, England, and France, owing to the fact that chickens are stolen during the night. When the peasants become too old for hard work, and their children have married and left home, they cease the breeding of table poultry, and keep hens for their eggs.

*Paper read at the Second National Poultry Conference, Reading, England.

Brackel, the Campine, and the Barbu Naine d'Anvers, from the fact that for centuries these have been the champions of cock crowing matches. The connection between early crowing, early development of comb and sexual organs of the cockerels, and early laying of the pullets, is sufficiently well known to need no further demonstration. The larger Brackel is found on the rich loamy clay soil of Flanders; the smaller Campine on the poor sand of the Campine country; the Brabanconne lives on the hard stony ground of Wallonish Brabant; the Herve fowl on the high plateau of the *Pays de Herve* (Limbourg); the rumpless *Poule sans queue* along the hedges of the woodland; the Ardennaise fowl is acclimatized to the elevated cold rocky lands of the Ardennes; the little Barbu Naine d'Anvers is everywhere kept by rich as well as poor people who have no room for larger fowls, in a yard or little garden, sometimes in a corner under the roof or in the cellar, or in a box with one or two square yards of netting around, but also sometimes in the fields flying at the head of a company.

The most prominent Belgian breeds of poultry are: (1) Combattant de Bruges; (2) Turkey Headed Malines; (3) Single Combed Malines; (4) Huttegem; (5) Brackel; (6) Campine; (7) Brabanconne; (8) Ardennaise; (9) Herve; (10) Sans queue (tailless); (11) Barbu Naine d'Anvers; (12) Flemish goose; (13) de Wiers goose; (14) de Virtou goose; (15) Blue Termonde duck; (16) White Moreltem duck; (17) Huttegem and La Plique duck; (18) Hervian duck; (19) Sermois duck.

With a short description of the external characters of each breed will follow the reason why size, color, and other points are so and not otherwise.

The Combattant de Bruges (Bruges Game fowl) does not appear to be a utility breed, yet it occupies the place at the head of Belgian races of table poultry, for the reason that of all the existing breeds it is the most important for imparting weight and quality of flesh to the Malines, and to strengthen the laying breeds. The Bruges Game cannot be fattened, but a cockerel of ten months old that has been trained for the cock pit, when killed is the most delicious eating of all the larger races of fowls. It is, or should be, the largest breed of the world. Crossed with Single Combed Malines, it produces the Turkey Headed Malines, which is much larger and can be kept growing two months longer before fattening. The Turkey Headed variety also retains its white skin and white meat. It is of interest to explain how, by a combination of external characteristics, it is possible to retain in a breed the size of body with whiteness of skin and flesh.* It is not at all difficult to enlarge a breed when yellow legged, yellow skinned, and partly yellow feathered. The problem to be solved was to secure a white skinned giant table fowl, say by breeding a blue giant Bruges without any trace of yellow. To our inquiries the cockers replied: "These exist no longer; the birds with golden 'epaulettes' have killed them all." After the yellow has been bred out of the skin, there is no danger of it reappearing in the feathers; but white, which results from absence of pigmentation in the skin, must be avoided in birds used for breeding. White is favorable to the development of great size, but is generally accompanied by weakness of constitution. When once obtained it is nearly impossible to breed out without loss of size. That is why the legs of a Bruges fowl must not be white. Even the toe nails should be gray or black, never white; the legs should be gray, never blue, for blue scaled legs go with blue veins under the skin, and grayish meat. The organs of sense must be surrounded with black, for black pigmentation means strength. Hence the reason why the eyes of the Bruges are black and he is gypsy faced.

The Single Combed Malines was produced by a cross between the old Cuckoo de Malines and the light Shanghai, imported to Antwerp about sixty years ago. This is the breed which, after being fattened, killed and marketed, now becomes the famous large, white skinned "Poulet de Bruxelles." For more than nine centuries fowls bearing that designation have given the inhabitants of Brussels their by-name of "Kiekenfretters." The external characters of the Single Combed Malines are a white beak, white legs, and white toe nails, these being signs of a white skin. The legs are large and thick, indicating an equally large skeleton, though the

bones are cut easily with a knife when the bird is roasted. The legs and outer toe are lightly feathered, because a feathered leg is always bigger, with thicker skin and more fleshy toes than a clean leg. No useless hock feathers, or large tail or wing feathers, or heavy hackles are desired; for feathers require much more nourishment than does flesh. The comb, wattles, and red earlobes in this breed are small, and should not be too red, except on adult cocks for stud purposes, as these should be bright red, as also the sides of the legs and between the toes during the breeding season.

A table fowl should be shown and judged exactly at the age when it is ready for fattening or killing. The size and weight of an adult bird has nothing to do with the size and weight of the same bird when it was six months old and ready for market. Some time ago Mr. Percy Percival was so kind as to send me eggs from Malines hens crossed with an Indian Game cock. At five months old the chickens were much smaller than Malines of the same age, then ready for fattening; but when ten months old they were larger and heavier, but too old to be fattened, and their food for four months had been wasted. An adult bird bred for generations to fancy standards may realize the points laid down, but in many cases these points are incompatible one with another, and often are detrimental to practical quality. When any breed has been artificially fed and petted in runs for generations, if the chickens were transferred to the Campine country where they have to meet alternately snow or burning sand, to live on buckwheat meal and buttermilk with peasants to whom one centime has as much value as a franc to the fancier, they would suffer greatly.

A Malines carries a small, fine, and thin comb, for be it noted, a large, rough, erect comb on the head of the cock, or hanging over in the hen, with long wattles and white earlobes, are attributes of the laying breeds, as also are black eyes and gypsy faces. The eyes of a Malines are more yellow than red. The color of feather is cuckoo, a mixture of black and white, and the fine flavor of the meat is communicated by the shining black feathers. White feathers, due to albinism, produce a fine white fleshed table fowl of attractive appearance, but lacking that delicious flavor that constitutes the difference between white veal and dark game. The Belgians have produced a combination of good appearance with finely flavored meat in the cuckoo and blue plumage, though the same effect is secured by black mottling and black or white under feathers. Any yellowish tint on beak, legs, or even toe nails must be avoided, for if yellow represents energy it means oil, resulting in yellow fat and an oily taste.

The Turkey Headed Malines, as already seen, is the result of a cross between Bruges Game and Single Combed Malines. This does not mean that a first cross will produce such result, as it requires several generations for breeding out the Game points, and careful selection before we obtain cockerels beating the record of meat production, namely, 2 lbs. per month.

The Huttegem is nearly related to the Single Combed Malines, and the buff variety is kept in the wet country near the damp meadows of the river Scheldt. By buff is meant gold varying between pale gold and dark cinnamon, always with black extremities. This race is specially used for sitting on duck eggs, and will cover seventeen in one nest three times successively, rear fifty ducklings, and then bring up a nest of her own chickens. The Huttegem is certainly a pure bred and one of the oldest Belgian races, and notwithstanding the introduction of fancy varieties in our country, it is possible to find on some old farms half a dozen of more or less pure bred hens. The main points of the Huttegem winter duckling hatching hens are pigmentation and feather. Yellow color means tire, energy, power of resistance to water, oil, and fat. The soft feathers of a Huttegem may be compared with the hard feathers of a Game fowl, as both are subject to the same rules as are the feathers of Belgian canaries. The color of a Huttegem is what is called buff (wit in Flemish) in a canary, while that of a Game fowl would be called yellow. Great progress in practical breeding will be secured by the application of ancient science, by the study of the influence of parasites on the evolution and formation of vertebrates, and, after studying the bird itself, enquiring as to the effect of insects on its feathers. This science of breeding is ever in the mind of the true Belgian, and they have transmitted part of it and their animals to other countries, where, as refugees, they found hospitality and freedom. For two thousand years they have retained

this knowledge, and maintained their free place among the nations.

The Brackel is essentially a laying breed, the best of all on her own soil. But as with other animals in which any special quality has been developed to its extreme limits, as soon as transferred elsewhere, or falls into the hands of those who do not possess the scientific knowledge to use aright, it fails to give satisfaction. The hen has a blue beak, blue legs, with white toe nails, black eyes, white ear lobes, and a large overhanging single comb. The typical color is silver. No more beautiful sight can be seen on a farm than a flock of a hundred hens, all with a snow white neck and a dark body. It is of no moment if the gray body color is barred, flowered, or simply ashen gray, for, except at feeding time, the birds are always seen at a distance, never penned in a cage. The peasants say: "Put a Brackel in a basket and the third day it becomes ropy." We will explain why when dealing with the eggs. Very often birds are seen with a black head, on a gold or silver. These are the best. I can only suppose that they are the result of reversion out of an old cross of Mountain Crows (Bergsche Kraiers), or Owl Bearded fowls (Uilebaard). There are also white, black, blue, gold chamois, and even silver chamois, like a white peacock.

The cockerels in their first molt have the same markings as pullets. This is sought for in a breed with marked feminine qualities, such as laying eggs, the cocks resembling as much as possible the hens, though it is better to have cocks white breasted, for if they are too much like the hens they become henly feathered and slow crows, and therefore useless. Cockerels of six weeks old are very like old birds in plumage, and the pullets like ostriches, but after laying develop hind quarters nearly touching the ground. Exhibition specimens hatched before May and June spoil the breed, as they lay at three months old, and become broody after producing twenty eggs, whereas if hatched later in the summer they lay in the autumn, and continue in profit throughout the winter without becoming broody.

The Campine is the same breed, but, by foraging over a wider area, it is lighter in body and more active. I consider that the Campine is a modified Brackel, because the Brackel, weighing 3 kilos (6¾ lbs.) lays an egg of 60 grammes, and the Campine weighs 2 kilos (4½ lbs.), and her egg is not smaller in proportion. Were the Brackel an enlarged Campine its egg would be smaller, for when the size of body of any breed is increased the egg is not made larger, and when the size of body is decreased the egg does not diminish in the same proportion. On open lands and woods Campines are generally black, as they are less seen by their enemies. These two breeds have been famous since the time of Charles V. for producing delicious milk chickens in winter, and in summer for the enormous number of cockerels (*poulets de grains*), which must be killed or caponized before they are four months old.

The Brabanconne demonstrates how external characters are allied with economic qualities. This excellent layer has, like the two preceding breeds, black eyes, a gypsy face, blue beak and legs, all indicative of good meat and eggs. The legs are very thin, and so closely scaled that they are free from the parasitic disease called "scaly leg." The color of plumage is black or white, in some cases with slaty stripes, or quail color resembling the Dark Dorking. The hind quarters are enormously enlarged, and the head half combed and half crested. The comb increases in size proportionally with crowing propensities in cockerels and early laying in the pullets. Sometimes the comb grows so large as to be a nuisance. The ear lobe is white. The comb of the hen does not hang over one eye, but over the beak. Crested birds are the best layers, and bear confinement, but a large crest is easily soiled by water and mud, and if not artificially cleaned, causes disease. In the Brabanconne cock the crest lies down and is scarcely seen, but in the hen falls backward, protecting the eyes from rain or sun. The eggs are very round, and a round egg contains proportionally more yolk than an elongated one.

The Herve is also an excellent layer, living in all weathers on a rough elevated ground. As a consequence of these conditions it is smaller than the three preceding breeds. Ten years of careful breeding have restored her ancient laying qualities and increased the size of egg, making it much prized on the market. The Wallons call her their *neur pouille* (black hen), but cuckoos and blues are equally popular. The Herve has a small single comb with round indentations, black eyes in a red face, without the white ear lobe of laying breeds. I find it

*Our first observations on the influence of different colored pigmentations was begun with Mr. A. F. Hunter, of Boston, U.S.A., and Mr. Edward Brown, F.L.S., when in the course of our excursions through the Campine country in 1898, we learned that yellow legged and yellow fleshed birds are better able than others to resist wet and other influences, as they are the hardiest of all poultry.

difficult to explain this fact otherwise than by showing that a Minorca is as good a layer with or without a white lobe. Possibly a white ear lobe goes with a large comb, and that the small comb, which does not freeze during severe winters, has led to the suppression of this feature.

The Sans Queue (tailless) or *Waelekieken* (hen of the Wallons) lives in exposed situations where it must defend itself. It is said that foxes cannot catch them, as they seize a fowl by the tail. The suppression of the rump and the large tail feathers is compensated by production of early meat and eggs.

The Ardennais, with her gray legs, gray earlobe and not too large comb, are found in exposed districts where Brackels, Malines, or Minorcas would not thrive. Their shining plumage indicates that as *poulets de grains* they are equal in quality to other products of the Ardenne country.

In Belgium we have three kinds of geese, but the Flemish alone is large in size. The goose of Virton is kept for her meat and her feathers, gray or gray and white. When plucked the white feathers are taken and the gray remain. The Flemish goose is also white and gray, and is plucked in the same manner. A small white goose with a blue top knot on the head is bred in the village of Wiers. The old industry of breeding goslings in winter and having them fat in twelve weeks was nearly forgotten, but is now taken up again. It is a small, quick growing race.

Duck breeding is a very profitable industry, because ducklings are ready for killing in a short time, and are very gregarious. White meat is the main point, and the desideratum is to obtain the birds as white and as fat as possible from new year to May. The Tufted White Semois duck with orange bill is an ordinary farmyard duck. The Herve is large and buff colored, with longitudinal brown stripes, as on the breast of an owl. The bill is dark flesh color or bluish, never green or orange. They are boat shaped and offer no peculiar feature.

But the family of the Prairie ducks of the Scheldt are worth study for size and color of feather and bill. Breeding the *La Plaigne* and Huttegem ducks begins at the end of October and lasts till the end of February. They are hardy in the extreme. A large, all white duckling could not stand the conditions, and medium sized are preferred. The best are white with dark blue bill, the half blue or half black. Sometimes specimens are found which are buff without any white markings. The Merchtem duck looks like an Aylesbury, but has not the useless dewlap, and the bill instead of turning towards yellow is occasionally spotted with blue. The large blue duck of Termonde is to the meadow ducks what the Bruges Game is to the Turkey Headed Malines, restoring vigor to the debilitated and lymphatic stock. It should not have any white on feather or bill, and must be large in body. The small offspring of large birds are strong, the large offspring of small birds are weaker.

In order to demonstrate the influence of large size of body on meat production, we have brought specimens of our giant Bruges Game, and of small size on egg production, the dwarfed bearded Antwerp Bantam. The Flemish peasant has been accustomed for centuries to consider eggs and butter as belonging not to himself but to his landlord. He has to make money out of these, and will not drink the milk of his cows or eat the eggs from his hens. He keeps one or two goats or ewes to supply milk for the household, and half a dozen bantams whose unmarketable eggs go to his children. Bantams have been for centuries accustomed to bear confinement under all conditions, and they can be kept anywhere, near the villas of rich men and the houses of artisans. The children, when accustomed to attend the bantams, to rear and feed them, learn kindness to animals, and acquire a knowledge that will be of great service to them in after life. The mother is happy in securing these little eggs for her household. This branch of poultry keeping contributes to the better feeding of our working population and the production of increased energy. Hence the motto of Bantam breeders is, "Humanity, utilite, publicite, sport." The artistic sense, the striving after beauty, is a necessity for humanity, which can be better satisfied by breeding bantams and cultivating flowers than by keeping large breeds, by those who have not large fields where they can be given the desired and required liberty.

When Mr. Edward Brown informed me that English Bantams would not be included in the conference exhibition, and I expressed my disappointment if we could not bring specimens of the Barbu Nain, he replied,

"You need not be alarmed at all about our decision not to have English Bantams, for you can bring the Barbu Nain, which will, I am sure, awaken great interest from a breeder's point of view, leaving you to convince those who see them of their utilitarian value." Recently we have found a distinguished advocate in Mr. Frank L. Sewall, the American artist, who in the June issue of the *Reliable Poultry Journal* says: "The Belgians offer no apology for their small breeds when discussing profitable egg producers. They put the assertion to me in this way: 'It is a great mistake to attempt obtaining in one body the two dispositions — to put on flesh and to produce many eggs. The one temperament strives against the other with the probability of failure in both.'

" 'Profit in egg production,' they urge, 'comes from the bird that will lay the largest egg for its size, or, in other words, the most eggs for the expense demanded for its keep.' They cite the Asiatic in contrast to the Bantam—the one weighing ten pounds, and foraging poorly, demanding much food to keep up its big body, and paying back only an egg of two ounces, while the Bantam, weighing scarcely one and a half pounds, eager to search for a large share of its food, requiring only a trifle for its sustenance, repays its owner with eggs in the proportion of one ounce each. We recall this and record it here for the encouragement of those who would like to take up the study of the Bantam, but fear that

they could not make their hobby self supporting." It is generally admitted in the household that three Bantam eggs are worth as much as two eggs of the shop. After three years selection by associating the cock that wins the crowing match with the pullet that first laid her first egg, we arrive at an average of 150 eggs.

The Club Avicole du Barbu Nain, of Uccle, gave out to one of its members of Brussels a cock and three little quail colored hens for breeding. After the breeding season, instead of giving away the insufficiently bearded pullets, he kept them all, and they did not cease a day laying eggs for the children during the very severe frost we have had this winter.

"We learned in Belgium, and had opportunity of seeing," continues Mr. Sewall, "that some of these old varieties of Bantams were found at a number of humble homes of cottagers in secluded out of the way villages, whose people do not travel miles from their own well worked little farms, and it is possible that a number of these varieties are of quite ancient origin."

Nor must the pleasurable side be forgotten. The study of a science which makes millions of large or small hens lay more or better eggs, that induces a little cock to crow the highest possible number of times in half an hour, is as intelligent and productive as the science of training a horse for a race, much more pigeon shooting or cock fighting, and is less offensive to the feelings of humanity.

Getting A Start

TO ALL persons wanting to begin raising fowls, and to those who are tired of going along slipshod fashion year after year, the best advice is to begin right. Get a good start, and half the battle is over. If you are new at the business, read and study all the things you can about poultry, and that will do no harm if you are tired of unbusinesslike methods and want to make money. The old saying, "Be sure you're right, and then go ahead," is peculiarly fitted to this business. A good start means everything in making a success later.

Several things enter into getting a right start. In the first place, too much money should not be spent; in the second you must be sure you have time and patience for the work; and third, you must study conditions. It is foolish and useless to introduce a few pure bred chickens into a mongrel flock and expect them to be the leaven that will leaven the whole lump. Many have tried this plan, and have failed miserably. Neither is it advisable to put pure bred or any other kind of fowls into a filthy house, thinking you will house them there for a short time, and clean up later on. Put off buying your fowls until everything is ready. Clean up the premises thoroughly, and plow under every bit of soil fouled by chickens that have belonged to you or anyone else before starting. Get your yards and coops into good condition, and then go ahead.

Save money on everything but your stock. Make your coops out of old boards, and cover with straw or corn fodder; make coops for little chicks out of store boxes; nest boxes out of cheap boxes; use old dishes for drinking vessels, and in every way economize so as to keep expenses down. Chickens do just as well in a cheap coop as an expensive one, provided it is dry and warm. Even a framework of poles banked with fodder or straw to be burned the following spring has been known to keep chickens safe and warm all winter, and one successful chicken raiser always uses the family supply of firewood raked up into walls and covered with straw for her fowls. In this way she has a new coop every fall, and thinks the chickens do better. Of course she has a permanent house too, but she likes the "wood house" for the winter season.

Usually it is the amateur who is the "sucker" when it comes to buying patent nests, wonderful brooders, incubators, remedies, and such articles. These are all right in the hands of persons who know how to use them, but amateurs are apt to get into debt and become discouraged with a lot of equipment on their hands that they know nothing about using. One enthusiastic poultry raiser turned out of a good incubator one season hundreds of helpless chickens to die of neglect when a few weeks old. His brooder was one of the best, and the incubator did its work well, but neither machine could teach the owner common sense in the management of fowls. He simply bought the machines too soon. If

he had waited a year or so he would have been able to handle them intelligently, but as it was he was glad to part with them for about one-third their original cost the first season.

It is poor economy to starve the chickens under the impression that you are economical. Better feed them well and rush them to market than to have a lot of hungry, peeping fowls at your heels whenever you set your feet outdoors. A hen will lay just as fine eggs in an old waterpail filled with straw as in a patent nest box, but she must have her crop well filled with seasonable food to make her worth anything as a layer or for the table. If wheat is very cheap in your locality, do not discard it for expensive corn, but manage to give the fowls plenty of good food, and use a variety. Milk, alfalfa, corn, table scraps, fresh meat, and other things will keep the chicks in good condition.

Don't waste money buying a lot of medicines in the start. Just remember that lice and filth are the bottom of most poultry evils, and determine to be without both. An occasional dose of some sort of poultry food, (and there are many good kinds), will do much toward keeping off diseases, but cleanliness and care will do more than all the medicines in the world. The best way to doctor most sick chickens is to cut off their heads and bury them deep in the earth.

When it comes to buying your first fowls make up your mind which is the best breed for your peculiar conditions, and then buy of a reliable dealer. If you want an all around hen select that type; if you live in town where the range is limited, get some of the big lazy fowls that do not care to wander, and if there are marked peculiarities in the preferences of the people you expect to be your patrons, keep them in mind when you start. Some people will buy only white fowls, and some prefer black ones. While it would be foolish to spend time consulting all tastes, it would be equally foolish to buy a variety for which there is no demand in your neighborhood. Begin modestly in everything but the grade of the fowls, and work to the top of the ladder. In this way your chicken business will be both pleasant and profitable.

HILDA RICHMOND.



Pekin Duckling Six Weeks Old,



Fattening Sheds at Weber Bros.' Duck Farm, Wrentham, Mass.

The Best Utility Ducks

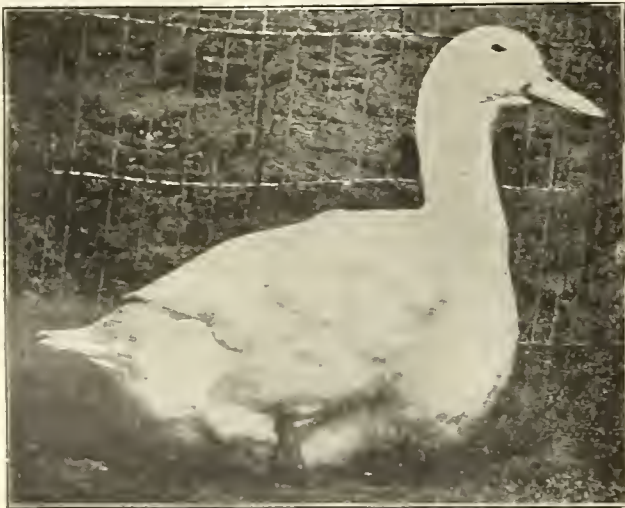
THERE are altogether nearly a dozen distinct varieties of domesticated ducks, but many of these are valuable for their outward characteristics only, their plumage, beauty of color, or shape; only five are of interest to the utilitarian, possessing as they do strong economic characteristics. It is impossible to state with any degree of certainty when or where ducks were first domesticated, but there are evidences that seem to prove they were kept in confinement before the Christian era, and that artificial methods of hatching were employed over two thousand years ago. All the many breeds we now possess are descended from the Mallard or wild duck, a race that is found in almost every country of the world.

THE PEKIN.—In describing the characteristics of the Pekin, I am well aware that with some of the statements my readers will disagree, but I would have them remember that I am describing the variety as I have personally found it. I was considerably struck, when in the States, by the wonderful popularity of the Pekin, and from what I could gather it proved a far more satisfactory bird than the Aylesbury. This is certainly contrary to my own experience, but doubtless the climate and soil of America are more favorable to the former than to the latter. Pekin ducks were introduced into this country about twenty-five years ago from China, to which country we are also indebted for several of our most valuable breeds. At the time of their introduction it was confidently prophesied they would speedily become the most popular variety in the country, but although they are to be met with in large numbers in certain districts, they have never usurped the premier position of the Aylesbury. They possess, however, several specially useful qualities, and for certain purposes, and under certain conditions, are extremely useful. Pekin ducks at first sight appear larger than they really are, owing to the fact that they have very thick plumage, while the feathers themselves are extremely fluffy; at the same time they are fairly large birds, an adult drake weighing about eight to nine pounds, and a duck a pound less.

The great value of the Pekin lies in its excellent laying powers, and in this respect it is superior to all other breeds of ducks, with the one exception of the Indian Runner. The eggs are fairly large, and once the ducks have commenced to lay they continue well into the late summer. The table properties of the Pekin cannot be called first class, as is indicated by the yellow flesh it possesses. Yellow flesh never sells well in England or on the continent of Europe, and while it is merely a question of fancy, yet it has to be regarded when supplying the market. Poulterers tell us that there is little demand for meat of this color at good prices, and it is only suitable for those who cater for a second rate trade. The color is the only thing against it, as its flavor and texture are excellent, and thus if there is no objection to yellow flesh, I can well realize why the breed is so popular a one in the United States. As a good deal of

confusion frequently arises between the Aylesbury and the Pekin, it may be well to briefly state their distinguishing features. Whereas the Aylesbury is boat shaped, the Pekin is upright, the legs being set more towards the front of the body; the beak of the Aylesbury is flesh colored, while that of the Pekin is a bright yellow; and in plumage the Aylesbury is dead white, whereas that of the Pekin shows a slight canary tinge. The head and beak of the Aylesbury is in a straight line, while the head of the Pekin curves sharply down before reaching the beak.

THE AYLESBURY.—Originally known as the White English duck, the Aylesbury has been bred for many generations in the vale of Aylesbury in Buckinghamshire the center of the duckling industry of this country. This is the breed almost entirely kept in this district, although from time to time a little Pekin blood has undoubtedly been introduced in order to give added



Aylesbury Ducks.

vigor. The great feature of the Aylesbury is its rapid growth, and no other breed is able to equal it in this respect. Every spring thousands and tens of thousands of ducklings are despatched from Buckinghamshire and Bedfordshire to London, weighing from five to five and a half pounds when only about eight weeks of age. This is at least a fortnight earlier than the Pekin, and four weeks earlier than the Rouen—a point of the utmost importance when prices have reached their maximum or are on the decline. It is not surprising under these conditions that the flesh of Aylesbury ducklings lack flavor, and is oftentimes quite insipid; it seems, however, that this does not affect the price so long as the birds can be marketed out of or very early in the season. When birds are allowed to develop slowly they possess extremely fine flesh, white, and of an excellent flavor and texture.

Aylesbury ducks are by no means first rate layers, and several of the other breeds surpass them in this respect. The ducks, however, usually commence early in the season, a very important matter where early ducklings are wanted; the eggs are of a medium size, and of a good quality. A very distinguishing feature of the Aylesbury is its shape, which closely resembles a boat, the keel or breast bone being almost parallel to the ground, giving great depth of body, and consequent large quantity of flesh.

THE ROUX.—This is the largest domesticated duck there is, as well as the oldest, and it more closely resembles its progenitor, the wild duck, than any other variety. At one time the Rouen was immensely popular, and was to be seen everywhere, but during recent years the Pekin and Aylesbury have in a large measure taken

its place. Perhaps the chief reason of this diminished popularity is that it is so extremely slow a grower, being, as already stated, quite a month longer than the Aylesbury in attaining killing size. The flesh qualities of this breed are particularly good; the meat is tender and juicy, of a fine flavor, besides which the birds lend themselves readily to fattening, soon attaining a great weight; an adult drake usually averages about twelve pounds, and a duck from eight to ten pounds. The ducks, as a rule, are rather late in commencing to lay, but this can be to some extent overcome by early hatching and suitable feeding; once they begin, however, they lay a large number, most strains being superior in this respect to either the Pekin or the Aylesbury. Rouens are by far the handsomest of any breed, possessing plumage containing almost all colors. The drakes are especially beautiful during the breeding season.

THE INDIAN RUNNER.—It is only within the last few years that this variety has been bred at all extensively in this country; in fact, it is comparatively a new breed. The great value of the Indian Runner lies in its wonderful laying powers, no other variety producing nearly so many eggs in a season, it being no unusual thing for the ducks to lay almost continuously for eight or nine months. It is interesting to note that the eggs very closely resemble those produced by hens, and several cases have come under my notice where Indian Runner eggs have been regularly marketed as ordinary hens' eggs. The edible qualities of Indian Runners are poor, and they cannot be recommended for marketing purposes. For one thing they are extremely small, an adult drake weighing only about 4 lbs., and a duck about a pound less. If one is keeping ducks to supply one's own table they answer well, but there is no demand for such small birds on the general market. A great point in their favor is that they are excellent foragers, and when at liberty are able to procure for themselves almost sufficient food. This means that they can be kept for very little, which is an important matter when one is keeping fowls for profit. Besides, the natural food that poultry obtain for themselves is always better than the artificial supplied to them. When at liberty they are able to procure a large quantity of worms, grit, grubs, etc., all of which are beneficial.

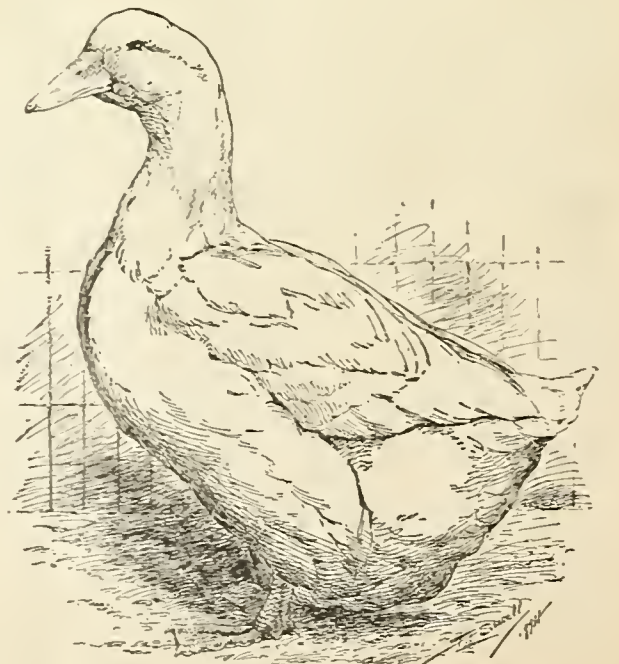
THE HUTTEGEM.—A breed that is extensively bred in Belgium is the Huttegem, where it is very popular and where it is considered perhaps the best utility duck there is. We have kept this variety for some years, and I am therefore able to testify to its excellent utility qualities. In several respects it closely resembles the Indian Runner, particularly in appearance. The back is rather flat, the frame narrow, the neck short, and the head long. In plumage the Huttegem is decidedly striking, the predominating colors being white and blue or fawn, while the beak is blue and the legs and feet slate blue. The ducks are not particularly good layers—they are about equal to the Aylesbury in this respect—although they commence early, frequently when not more than three and a half or four months of age. The chief quality of this breed is the excellence of its flesh, of which it carries a generous supply. The breast meat is especially abundant, giving the birds a very good appearance when killed. The ducklings grow quickly, and are extraordinarily hardy.

E. T. BROWN.

England.



Indian Runner Ducks, White Birch Poultry Farm, Bridgewater, Mass.



Pekin Duck.

The Story of the Moneytoburn Poultry Farm

Chapter XXXVIII. — A Practical Scientist.

"YOUR breakfast is ready, Mr. Cacklemore."

"Very well, Mrs. Cacklemore; I will be there in an instant."

Mrs. Cacklemore took the toast from the warming oven to the table, and began to make the coffee. She was a frail little woman with faded yellow hair, a pasty complexion, and an expression of unrelieved weariness.

The slap, slap of loosely slipped feet on the bare floor of the passage was followed by the entrance of Mr. Cacklemore — Jason Cacklemore, Sr., author of "Self-Taught Science for Poultrymen," and consulting expert in poultry matters.

He was a tall, fleshy man, smooth shaven and sallow. His pale blue eyes bulged from either side of a broad flat nose. His dark hair, tinged with gray, was brushed smoothly and straight back from a high retreating forehead. His chin was so insignificant as to seem hardly to belong to the face. The mouth, which in repose seemed the proper complement of such a chin, when he spoke opened over each word with such expansiveness that to a stranger it often seemed to be about to extend beyond the possibility of return to its first dimensions. He was dressed for breakfast—and, perhaps, for the day—in his night shirt, baggy and very shiny black trousers, sky blue socks, embroidered slippers, and an ample dressing gown that looked as if it might once have been purple outside, and the lining of which still was unmistakably red.

He entered rubbing his hands. "Ah-h-h, ah, lovely morning, Mrs. Cacklemore."

"It'll do."

"Where's Junior?"

"Gone for the mail."

"What—not back from the mail yet? What time did you call him this morning?"

"The usual time."

"The usual time! That is—"

"Any time after six."

"Mrs. Cacklemore, you trifle. Ah-h-h-ah, here he comes. How is it you are late this morning, my son?"

"I'm not late—you're early. Ma's clock's a quarter of an hour too fast."

"Mrs. Cacklemore, isn't it possible for you to keep that clock right?"

"If I'd nothing else to do I might."

"How many letters this morning, Junior?"

"Nineteen—seven of 'em big fat ones. An', say, Pa, there's a man down at the hotel enquirin' for you. Patsy Burns said he came in last night."

"Enquiring for me—I wonder who it could be."

"Patsy says he wrote, 'Henry Goode, New York,' on the register."

"Goode—Goode—Henry Goode. I don't recall any correspondent of that name. Well, Mrs. Cacklemore, why don't you pour my coffee? I must get my breakfast and dress before this—ahem—party arrives."

"Junior, you may black my shoes before you eat. Mrs. Cacklemore, did you iron my white shirt this morning?"

"Not yet."

"Not yet! And when, may I ask, do you intend to do so?"

"When Emmeline sends the irons back. She borrowed them yesterday."

"Junior, run right down to your Aunt Emmeline's, and get an iron. Hurry now."

All this time Jason, Junior, who resembled his mother in appearance, and his father in everything else, continued eating his breakfast."

"Junior, do you hear me?"

"Yep—pretty soon."

"Such a wife and son are enough to drive a man to drink! If I were not the most philosophical of men—"

"Somebody knocked, Pa," interrupted Junior, "must be him."

"Mrs. Cacklemore, why don't you answer the door?—but stay. I'll go myself."

Mr. Henry Goode felt strongly inclined to laugh when the door opened and Jason Cacklemore, Sr., stood framed in the narrow door way, but he succeeded in restraining his mirth and asked: "Does Dr. Cacklemore live here?"

"My name is Cacklemore, though I do not—yet—prefix the 'doctor.' What is your business with me?"

"Are you the poultry expert and author of 'Self-Taught Science for Poultrymen?'"

"I am."

"I wanted to consult you on a number of points in poultry keeping. Goode is my name—Henry Goode."

"Ah-h-h pleased to see you, Mr. Goode. Walk into my study. You must excuse my dishabille. I was working out an idea last night and forgot all about sleep until almost morning—then just snatched a few hours sleep. That chair there. Let me take your hat. I'll just put those papers on the floor. As I was saying, I was up all night."

"'Tis I should apologize," said Goode, "for calling so early. I came in last night, and find that there is no train out of this place later than 1.30 this afternoon, and as I wanted to see your poultry plant as well as consult you about a number of matters, I thought an early call best."

"No apologies—no apologies, Mr. Goode; my time is my clients'—you understand. I'll just excuse myself long enough to finish my breakfast. Perhaps, meantime, you would like to look over the manuscript I was at work on last night."

"I'd be delighted, I'm sure. I never had a chance to see the work of a celebrated author in manuscript before."

"Now, Mr. Goode," said Cacklemore, as he reappeared a few minutes later, "I must beg your indulgence while I glance through my mail. Occasionally I have a correspondent in trouble who wants immediate advice by telegraph."

"Certainly, certainly, Doctor," replied Goode. I came at an unseasonable hour, and of course expect to adapt myself to your convenience."

Cacklemore began to open his mail. With few exceptions the letters contained postal or express money orders, or stamps. As he opened each letter he entered the amount of the enclosure on a memorandum slip, and when he had finished footed up the column, exclaiming as he did so, "Four eighty-five,—quite satisfactory. Now you would never suppose, Mr. Goode, that a single day's inquiries from poultrymen, averaging less than ten cents apiece, would bring me in four or five dollars—would you?"

"I hadn't thought of it at all, but—off hand—considering how widely known you are, and the tremendous sales your book has evidently had, I would not have been at all surprised had you mentioned an amount several times larger. Your book must have realized you quite a fortune."

"Not directly; indeed I may say that all that I get out of the book is indirect. The book is the basis of my work as advisory expert. You see were I to sell the book at fifty cents a copy, and let my interest in the buyer and his in me end there, I wouldn't get much out of it. My income from the book would be about ten cents a copy. But the book simply introduces me and my methods and ideas to the buyer. That is the most that a small volume can do. It puts him on the right track, and builds up his confidence in me. Then when he is in trouble he comes to me, and I help him out at fifteen cents per question, two questions for a quarter, ten for a dollar, and additional questions at five cents each—compound and complex questions reduced to simple form and charged accordingly. A great many people think it outrageous for me to charge fifteen or ten cents for a reply that merely refers them to the proper place in my book; but others with a keener perception of the matter see that the few cents spent at the right time to get the information they need, is a good investment, and I have correspondents who write me almost weekly, and must in the course of a year pay me ten or twelve dollars in fees."

"This is all very interesting, I am sure," observed Goode. "As I have a good many questions to ask, and it might be troublesome to keep count of them, can't we come to some agreement in advance, for a lump sum, or for so much per hour?"

"An excellent idea—most excellent. Of course for personal interviews I must charge more."

"Fix your own price."

"You said you wanted to leave at one-thirty, I believe."

"Yes, unless I should conclude to stay over night."

"Then suppose you say four dollars. That will be about a dollar an hour?"

"That will suit me."

Goode drew a roll of small bills from his vest pocket, and selecting two clean crisp "twos," passed them to Cacklemore.

"Now," said he, "it is up to me to get my money's worth. First, let's go look at your plant."

"Ah—ahem. As you must have observed, Mr. Goode, as you came along, we live in a neighborhood where fowls would be objectionable to the neighbors—even if we had room to keep them—which we have not. My fowls are all kept at my brother's, in the next town."

"Couldn't we go over there? How far is it?"

"Only fourteen miles by the railroad, but seventeen by the wagon road, and a most abominable one it is. There are but two trains there a day. The morning train went less than an hour ago. The other goes about eight this evening."

"That's too bad. Still, except for the matter of expense—I really can't afford to engage so much of your time—I'd stay over, and go there with you tomorrow."

"I don't see how I could do that," said Cacklemore, hesitatingly. "To give the better part of the day to you means that many of today's letters must go over until tomorrow, and were I to give you tomorrow too, I would get too far behind with my correspondence."

"But in your writings you frequently mention observations on fowls as if you saw them daily—"

"Oh, those are not my own fowls. My daily observations are made chiefly on the fowls of neighbors—not near neighbors—say half a dozen to a dozen blocks away. After I get through my work each day I go for a walk, and so intense is my interest in poultry that I almost invariably take the route that will lead me by the homes of a number of people who keep poultry. Observing so constantly these fowls kept by so many different people—my range of observation is greater than could be possible with fowls of my own kept according to my ideas. In fact it is from observation of fowls not kept according to my ideas, that I get the best demonstrations of their value."

"The people on whose fowls you make observations don't use your ideas—I infer from what you say."

"Not—just as I should use them."

Goode sat silent for several moments, then said, "Doctor Cacklemore, I'm greatly disappointed. I came here expecting to find your ideas being demonstrated on your own premises."

"My dear sir," exclaimed Cacklemore, reaching for a huge letter file, "here is the evidence that my ideas are in successful use on thousands—on tens of thousands of premises. What would such little demonstrations as I personally could make amount to in comparison with these? Ah, Mr. Goode, you—like too many others, miss the point—and fail to grasp the motives actuating men like me. To do things calls for the lowest order of ability; to be able to make thousands of others do things calls for the highest. That is what I am doing."

"But," persisted Goode, "if your principles apply equally to poultry in any numbers, I should suppose you would put them into operation on a mammoth scale yourself, and—"

"The natural supposition—quite natural; but you must understand, Mr. Goode, that my principles—my ideas can be carried out successfully only by persons who rely on me and follow my instructions implicitly. A mammoth plant, on any plan, calls for the services of a great many men. The difficulty—I should say—the impossibility of getting together any considerable number of such men is the practical obstacle to the application of my ideas on a large scale. As you see, now they are being carried out in a small way by many people. I have referred to the impossibility of getting such people together. I speak of it only as at present impossible. It is the dream of my life that some day I may bring all these people together to combine their capital, and under me to establish a poultry community that shall be the beginning of the greatest co-operative and social movement the world has ever seen."

"Well, Doctor," said Goode, rising and taking his hat, "I find that it will not be necessary for me to take any more of your time. The statements you have just made anticipate everything I had intended to ask you. Your system—being dependent upon men, can't help me. I'm looking for one that will make me independent of the help question. Good day."

(To be continued).

Editorial Page of Farm-Poultry

Who Shall Control the Poultry Shows?

“FROM a loosely constructed organization, with but little influence in directing the pure bred poultry industry of this country, an association in which it was possible for only a few of the members to take an active part in any one year, the American Poultry Association under the new order of things has risen to be a power in the land. * * * Among the things the association should do at once is to take over control of the poultry shows. * * * It would be very easy for the association to do this. It now licenses judges, and has assumed control of them to the extent that the life of any license depends entirely on the manner in which the licensee discharges his duty.

“It would be easy for the association to take charge of the shows and outlaw every show not conducted under its rules, and by right of a permit granted to the association holding the show. It has power to forbid judges from judging an outlaw show, and if it would assume the authority which clearly belongs to it, it might soon bring about a condition which would nullify the value of any prize won in a poultry show which had not been authorized. The big shows would no doubt be glad to fall into line with such an arrangement by refusing entries of birds which had been shown in an outlaw show, and the poultry press could probably be relied upon to decline to give notice to shows held independent of the authority of the parent association.”—*Poultry*.

These are brave words, but we do not think they will inspire terror and panic among the local poultry associations. Such utterances are more likely to arouse a spirit of opposition.

Editor Purvis' statements as to the position and power of the American Poultry Association are—to say the least—premature. The association has not fairly begun working under the new constitution, and it is not yet evident how it will come out in some of the things it is undertaking. It has issued licenses to a number of judges in such a way as to bring a measure of discredit upon its licenses—and none at all upon unlicensed judges. The managers of a few large shows have consented to hold their shows this year under the new American Poultry Association rules. This does not mean that they put these shows unreservedly and forever under the jurisdiction of the American Poultry Association—not by a great deal. What it does mean is that the management of these shows allow the A. P. A. rules in their shows on trial.

The American Poultry Association can never “take over” the control of the shows without their consent.

The local poultry associations which hold the shows, which bear the expense and responsibility for them can “take over” the American Poultry Association at any time that they will unite in an effort to do so.

It is for the interests of the local poultry associations and of the entire fancy that there should be a national organization built up progressively from the local associations.

The natural order of organization and authority is not individuals in a so-called national association controlling the judges, the shows, and the standards, but individuals in local organizations, representatives of local organizations in state or sectional organizations, representatives selected by the state or sectional convention, sitting in national conference, and each organization in the series having the sphere of its power and influence properly defined, it being understood and declared that the source of power is in the local organization, and that each higher organization derives its powers as it does its constituents from the lower.

The American Poultry Association, instead of assuming it has certain powers should devote itself to bringing about a situation in which it would actually have such powers. No member of that organization believes more firmly and fully in giving a national organization such powers as can best be exercised by such a body, but we believe in self government through delegated powers, not in submission to irresponsible assumptions of authority.

It is too early in the day to begin to talk of outlaw shows. When a majority—and a big one—of the shows are securely under the law of the A. P. A. it will be time enough to think of outlawing the others. Nor is it wise to begin to talk of various kinds of boycotts for shows that will not submit to self constituted authority, or to assume that the big shows and the poultry press will help to whip independent shows into line. The big shows generally want all the entries they can get, and we doubt whether any of them would so much as consider refusing to enter a bird that had been shown at a show not held under certain rules. We doubt it because we have found managers of big shows generally well supplied with common sense. As to the press, we speak only for ourselves, but we do not think F.-P. is the only paper that is above such practices.



Standards For All Purposes.

DURING the last three months we have given in each issue of FARM-POULTRY one or more of the papers read at the British National Poultry Conference, at Reading, England, last July, yet as we look over the volume containing the full report of that gathering, we find that we have given only a minor portion of them. The report makes a volume of nearly 400 pages (6 x 10) and we think presents more well considered information on a greater variety of matters of interest to poultrymen than any other volume of poultry literature we have seen.

In reading it we have found it impossible to avoid comparison of the work done here with that of the American Poultry Association Institute and meeting at Niagara Falls, a month later. Such a comparison is often expressible only in contrasts, for the underlying ideas of the two gatherings were very different, yet we find more and more as time passes, suggestions emanating from both sources combining to give us an occasional fresh idea.

The American Poultry Association has during the third of a century of its existence given attention almost exclusively to “standards” for the external characteristics of fowls. At this meeting it took up the question of “practical standards,” standards for judging the eggs and carcasses of thoroughbred fowls. The action taken on this question may be taken as an indication of the belated development of consciousness that the question was outside the sphere of the association, or realization that the committee to which the matter had been referred was a misfit.

The British conference continued four days, discussed many matters, but came to no “official” conclusions. It adjourns and gives the report of its proceedings to the public. Each reader may draw his own conclusions.

Following one of the papers read at the British conference, a gentleman made the suggestion that “reliable and responsible people, say the Poultry Club, or the Utility Poultry Club, or the Board of Agriculture and Fisheries should license houses to carry so many fowls, because I believe that poultry houses should have a carrying capacity—they require a Plimsoll mark just as much as ships. A great many houses are put upon the market stated to carry so many birds, and people buy them because of that. This seems to me to want to be cut down; if we could only buy houses and know that they were all right, I think it would greatly add to the value of the houses.”

That remark is chiefly interesting to us because it is typical. It expresses the attitude of a great many people on a great many matters connected with poultry culture. They want some reliable and responsible authority to give them standards, rules, directions, formulas covering all possible points—they want poultry keeping reduced to a “science.”

Why should it not be? And, why should not a body of experts on such matters as housing, feeding, the principles of breeding, etc., etc., get together after the manner of standard revision committees find out upon what they can agree, and give the results to the public? Why not?



Foxes and Poultry.

AT the recent poultry conference in England one of the speakers, Mr. Orlebar, made this statement:—“It is often a difficult matter to provide for chickens when they reach the stage of field culture. Then it is that the ravages of foxes play havoc with the poultry that are not enclosed. I have been fond of hunting all my life, but I freely admit that foxes are terribly overpreserved in many parts of the country. Without a very heavy expenditure in wire netting it is impossible to rear a large head of poultry on what is called the colony house system. No Hunt Poultry Fund could possibly stand the losses that would legitimately fall upon it, so wire netting must be used in England.”

In the discussion which followed, Prof. James Long, referring to this statement, said:—“I do protest against that. I have lived in a country where there is much fox hunting for thirty-five years, but I cannot conceive any gentleman, especially a land owner or a farmer laying down a dictum of this kind, that an industry must suffer, that it must provide wire fences in order to provide foxes for huntsmen to chase. The whole thing is perfectly monstrous. If men choose to hunt foxes let them do it. I have done it myself. Many are only taking their amusement after their work, but the majority are idle men, and I cannot see why workers should pay for their privilege.”

From an American poultry keeper's point of view Prof. Long's observations appear so much to the point that the logical result might well have been a resolution expressing an opinion of the conference in accordance with his sentiments. But that was not what happened. Instead:—

“THE PRESIDENT: These remarks are quite irrelevant to the subject of the paper before us.

“PROFESSOR LONG: But it is in the paper.

“THE PRESIDENT: We are not discussing fox hunting at all.

“PROFESSOR LONG: But I have said what I had to say, thank God.”

In one sense the question of foxes and poultry in England does not especially concern us. In another sense it becomes of considerable importance. It is to the interest of people who keep poultry that all wild birds and animals which prey on poultry should be exterminated. Some adaptation or modification of the colony system seems at present the most likely solution of the problem of profitable specializing in poultry in connection with other lines of farm work. The most serious obstacle to a more general use of such methods is that when fowls—particularly growing chickens—are scattered widely over the land foxes and other vermin make such ravages in the flocks that losses are very heavy. In a state like Massachusetts where there is much land unsuitable for cultivation and alternately covered with brush and wood, a few foxes making their home in such a tract adjoining pastures and meadows used for poultry will do hundreds of dollars worth of damage in a single season.

Foxes are not protected here as they are in England. Some of our poultry keepers thought a few years ago, that if the state would offer a bounty on foxes their extermination would proceed more rapidly. The gentleman in charge of the bill secured letters from many people interested in growing poultry expressing their approval of the bill, and belief in the desirability of such a law, and with one or two others went with this testimony before the committee of the legislature to which the matter had been referred. These two or three poultrymen attending the hearing found the room crowded with fox hunters present to oppose the bill. Numbers ruled, and the bill was not pressed. The advocates of the bill, however, are not discouraged, and it is likely to come up again, and to come with stronger support.

We refer to these two incidents because they illustrate a principle of practical importance to keepers of fowls on farms, and also illustrate the fact and show the nature of the obstacles to a practical application of the principle. The existence of predatory wild animals is an obstruction to the natural development of an important industry. It is not unusual for states to offer bounties for the destruction of such pests. Though in occasional instances the bounty acts as an incentive to men familiar with a locality to protect adult foxes or other destructive animals, and thus secure a regular revenue from the scalps of their young, there appears to be no doubt that on the whole giving bounties does lead to the extermination of the animals at which they are aimed, for the man who may himself allow an animal to live that he may get more bounties from its progeny cannot protect it from anyone else.

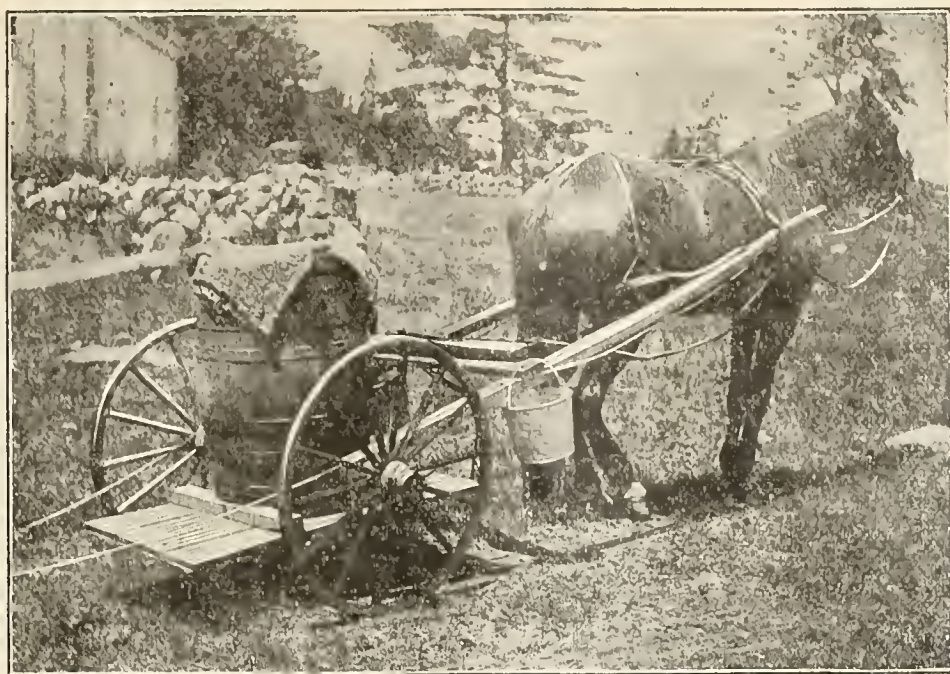
The objectors to the payment of bounties on foxes desire the preservation of foxes merely to furnish them with sport, but if many are interested in a sport, and only a few appear in behalf of the industry to which it is said to be directly or indirectly harmful, those who have to pass on the question and have no personal bias either way cannot help being influenced by numbers.

The lesson is obvious. Poultry keepers in every part of the state who want additional protection from foxes must actively support an effort to secure a bounty law.

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A Poultryman's Water Cart.

Worms in Poultry.

NOTICE in the September 15th issue of FARM-POULTRY that B. P. F. asks for information about the origin, prevention, and treatment of intestinal worms in chickens.

The same trouble exists in my poultry yard, both among the young stock and the older fowls. The latter, however, are not seriously affected, the only noticeable symptoms being a mild, harmless form of chronic diarrhea. It is the young birds that are fatally smitten; and, although the mortality has at no time been great, there always exists the possibility of the disease breaking out in epidemic form.

Although the outlook for keeping poultry under such circumstances is not very encouraging, yet I have taken advantage of the opportunity offered to investigate the various aspects of the disease, and to discover, if possible, both preventive and remedial agencies. The data acquired may be interesting to those readers who are in a similar predicament.

The origin of worms in poultry is somewhat obscure; but it is most probable that they are devoured in embryotic state with the food, to find lodgment and develop in the digestive tract. Much of the ground feed that is fed to poultry is "mitey." It contains myriads of insects barely visible to the naked eye, but readily discernible under a microscope. I have personally examined such feed, and have seen the mites present in large numbers. If such food goes uncooked to the fowls, it surely will cause lesions somewhere along the digestive tract. Meat and bone should always be regarded with suspicion, especially if they are tainted. Tapeworms in human beings originate directly from raw and partially cooked beef, pork, and bolognas, so the doctors tell us; then why can not worms in fowls originate from the same source? Some writers claim that worms are constantly present in the intestines of fowls, and that they only become troublesome when their numbers greatly increase through unsanitary conditions, or feed that favors their propagation.

When once present in a flock they are rapidly communicated to each member by the food coming in contact with the droppings of infested birds, or with the contaminated ground. This is the reason why young chickens running on the same ground with the older fowls are quickly affected, especially if reared with hens. You can feed the chicks on boards or in troughs, but you can't prevent a portion of the food from being scattered in the coops and on the ground, to be eaten later with all the filth attached. Especially is this true in rainy weather.

It was only last summer that I had my first experience with the parasites. Before that time I had raised only two or three broods in a season, and these were never affected. Last summer I had twelve broods, all grouped about the barn building where the old fowls were quartered. The hens could range out into adjoining fields, but they invariably kept close to the coops, and in consequence the bare ground

became quickly saturated with the droppings. One boundary of the poultry yard is a fair sized stream. The site is very low, with a clay subsoil; hence all accumulations remain on the surface, to be beaten into a filthy mire during rainy weather, or when the stream overflows its banks.

The chicks were four weeks old when I first noticed alarming symptoms. They began to mope, and although they had ravenous appetites, the food remained like a dead weight in their crops. I thought the disease due to lack of grit, and hastily sent for a supply; but the chicks, and others afterwards stricken, died in spite of the grit and small doses of castor oil administered to move the contents of the crop.

Then, to get at the root of the trouble, I made a post mortem examination of the body of the next victim. Its emaciation was extreme, almost every muscle and particle of fat having wasted away. The viscera were perfectly normal in appearance, no morbid changes having taken place; but on cutting open the intestines I discovered the real cause of the disease. It was due to the presence of round worms, the *Heterakis perspicillum* of the scientist. Since then I have made many post mortems, and the appearance of the internal organs is generally the same in each case. The worms confine themselves to that portion of the intestines next the gizzard. The reason for this is obvious. It is here that the food has been converted into chyme, resembling thick cream, and is ready for absorption by the lacteals. The worms live and thrive and increase in this highly nutritious medium, until finally they appropriate the greater part of the nutriment to their own use, or prevent the continual passage of the semi-digested food from the gizzard. Then the bird dies after a lingering illness, starved to death with a full crop. Sometimes the worms become so numerous that they enter the gizzard, and even the crop, but they never move towards the cloaca, for there the intestines contain nothing but excrement. When the chicks become large enough, and there is a corresponding expansion of the digestive tracts, then the intestines can no longer be clogged by an accumulation of worms; the danger point is then passed.

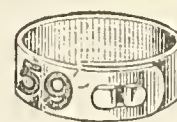
In every chick that I examined, I also discovered at the closed ends of the ceca quite a number of tiny white worms not much thicker than a thread, and about one-half inch long. Whether this is a distinct species, or the young of the round worm, I am unable to tell. I have quite often noticed both young and old fowls voiding thin, frothy, yellowish droppings (the contents of the ceca) that contained these small parasites.

The symptoms of the presence of worms are not difficult of detection to one experienced with the disease. The affected bird begins to mope, its feathers assume a ruffled and lusterless appearance, the head is drawn down to the body, there is a stiff, lumbering walk, extreme emaciation, the face pale, sunken, peaked, and hawklike,

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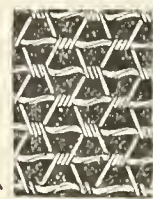
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and the appetite in most cases is ravenous, although the crop may be filled to its utmost capacity. The food does not move on as in a healthy fowl, showing that there is some obstruction to hinder its free passage. The droppings may be natural at times, but as the bird grows worse, a diarrhea sets in, always containing a large proportion of dirty, or reddish, beef-colored mucus. This is the characteristic symptom of the presence of the parasites. It is rare indeed that a worm is voided, except when the contents of the ceca are evacuated. The birds will thus linger on for weeks.

My young stock is generally free from danger when they have reached about three pounds in weight.

The measures which I have employed to combat the worms have not always proved successful, but I have thus far succeeded in holding down the mortality to less than ten per cent. This year I thought to head off the disease by giving the chicks a daily feed of onions in their mash; but the onions had no apparent effect in preventing the worms from beginning their deadly work. Before I was aware of it, I had half a dozen unsuspected cases among the early broods. To these I gave a dose of turpentine, following it up immediately with a dose of castor oil. Those that were too far gone died in a few days; examination of the intestines revealed that the turpentine had killed the worms, only the chicks were too weak to recover. Those that did recover had a long time in regaining their flesh. On some cases I tried santonin and calomel tablets, one-half grain each, giving four doses, then a dose of castor oil; but these drugs were not as effective as the turpentine. The latter is best given diluted with castor oil or sweet oil. In its unmixed state it is liable to cause severe inflammation of the crop and bowels, and to retard digestion. Mixed with oil, its harshness is mollified, and the oil also insures its rapid passage through the intestines, and prevents its absorption by the kidneys. In no single instance have worms been voided after treatment has been given, although I have every reason to believe that the parasites have been killed. At least the majority of cases began immediately to improve.

After the onion treatment failed I adopted other preventive measures. Almost every brood had quite a dejected

look, and I once despaired of losing them all. I kept their coops scrupulously clean, and scattered air slaked lime freely about the premises. A mash was fed in the morning, wheat and cracked corn at noon, and the same at night. I never threw their feed on the bare ground, neither did I stuff them with grain. With their abnormal appetites they would fill their crops, and overtax their weakened digestive apparatus. In the mash I mixed ground quassia chips sufficient to give it a slightly bitter taste, and in their drinking water, which was renewed thrice daily, just a pinch of copperas. To those that appeared most dejected I gave each a capsule containing five drops turpentine. Following this treatment, the chicks took on a much livelier appearance, and during the time I kept it up only a few sporadic cases presented themselves. Then I discontinued adding the drugs for fear of causing gastric disturbances. Instead I began to salt the mash, and this seems to have the same beneficial effect as the quassia and copperas. Now, whenever a chick begins to mope, I give it a dose of turpentine and castor oil, and it usually comes out all right. None of the preventive measures, however, serve to destroy the worms entirely, but they help to keep the parasites under control until the chicks are out of danger.

To accomplish a complete eradication of the pests it would be necessary to dispose of all contaminated stock, then clean up the houses and runs, spraying thoroughly with some strong disinfectant solution, plow the yards and broadcast lime over them, afterwards sowing to some green crop. The plant can then be restocked with birds that are not infested. It would be far better to raise chicks artificially on uncontaminated soil, but this is impossible for me to do, so I must make the best of a discouraging situation, or quit raising poultry.

Recently I have consulted a veterinary surgeon about the affliction, and he states that oil of wormseed and oil of tansy are also efficient remedies. He states further that the worms rapidly increase when much starchy food is fed, the starch being transformed to sugar in the digestive tract; and sugar is one of the best mediums for propagating the parasites. Hence the advisability of feeding less cracked corn, and salting the mash.

S. D. BLAUCH.

More About a Strange Case.

EDITOR FARM-POULTRY:—In the Editor's Question Box, of Sept. 15th, 1907, A. B. C. asks about what I call dead eggs. I have been waiting a number of years for someone to ask this question in some of the poultry papers. I handle a large number of hens every year, killing hens of all ages for many different poultrymen, drawing them and fitting for the table. In doing so I find a great many of these dried yolks, some full size and loose among the intestines; some still attached to the egg cluster, and indented as the eggs around them grew in size until the dead egg is forced from the cluster. I have killed whole flocks of hens, every one of which would have dead yolks, some very small, some full size. All these hens were perfectly healthy as far as anyone could see. In Aug., 1906, I killed 200 for one man, not one of which looked sick. They all had dead eggs. I have been told by a man that cuts the poultry for a large hotel in New York that he finds many dead yolks in frozen hens from the west. I find that hens of my own that lay but once in three or four days, have these dead yolks, indicating that when it comes time for this dead yolk to pass into the oviduct it passes to one side and the hen does not lay until the next one grows.

This trouble is growing fast. It is in small as well as large flocks, in hen hatched as well as incubator hatched fowls. I find ten now to one five years ago. As for the passage being closed in this case, it might be so, but as a rule it is not so, for the hen continues to lay irregularly though carrying a number of dead yolks. In April, 1907, I killed 50 White Wyandottes for a man because they would eat their eggs as fast as laid. I removed 14 eggs after killing the hens, placed 7 under hens, and 7 in the incubator. Hatched

4 chicks from the hens, 3 from the incubator, showing the hens were healthy. From these same hens I took dead eggs. Many who complain that their hens do not lay well though having the best of care, if they would kill one and examine the egg cluster would find dead eggs, some so small as to be hardly noticed, seeming to be filled with brown fluid.

GEORGE E. FOSS.

More Phenomena of Cross Breeding.

Editor FARM-POULTRY:—I have read Mr. Willmarth's article in F. P., Oct. 1, on "Parental Influence on Offspring." Some of my results of crossing would not prove the truth of his deductions. I crossed a Buff R. C. Leghorn cockerel with some Buff Rock pullets, and a White S. C. Leghorn hen and a Brown S. C. Leghorn hen. Every bird out of 40 had fairly good rose combs, except one pullet had a thick single one. There was one nearly all white pullet; the rest were about a dozen solid buff, eight buff and white, and buff with black penciling something like a G. P. Hamburg—20 pullets in all. The cockerels were mostly buff color except from the Brown Leghorns, and those showed some black. The cockerel regulated combs and color both in this case for most of the offspring. I crossed a S. C. W. Leghorn cock on some Barred Rock hens, and all the offspring were white. They were not good clean white, but there was no other color in either sex. They were more Leghorn in shape and size than anything else. I crossed some of those with Barred Rock cockerel, and got only one chick, a snow white Rock pullet. Mated with White Leghorn cock they threw quite good looking W. Leghorn chickens.

S. P. D.

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The Editor's Question Box.

In this department the editor will answer miscellaneous questions on poultry topics, and all special requests for his personal views which can be answered briefly. Inquiries will be answered as promptly as possible and as nearly as may be in the order in which they are received.

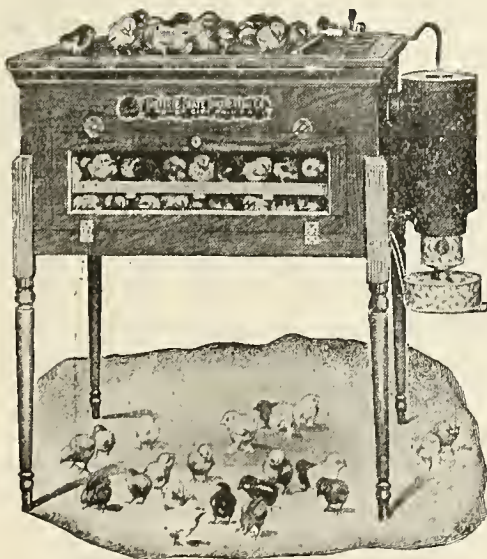
Prices of Grain. (E. A. H.)—"With grain at the following prices how would you feed our fowl? Corn meal, \$1.60; wheat bran, \$1.45; wheat middlings, \$1.55 per 100 lbs. Cracked corn, \$1.60, and wheat \$2 per 100 lbs.; oats, 72½¢, and barley \$1.10 per bushel. We have about 300 pullets divided as follows: 150 Reds, 100 White Leghorns, and 50 Barred Rocks. How long do you think grain will remain at the present high price? If you could answer by mail it would be doing us a great favor, as we want to make any change in the feed at once. We intend to feed cut alfalfa in the mash when the fowls cannot get grass any longer."

When all grains are high, and the advance has been quite uniform all around, there is little chance for economy by changing rations. Corn at \$1.60 per 100 pounds is relatively cheaper than wheat at \$2. As far as it can be used advantageously corn is worth just as much per pound for food for fowls as wheat. For fowls that do not tend to fatten too readily, and have abundance of green food and exercise, corn alone might be used, but in most instances it is better and safer to feed laying hens some other grain also. A good plan is to make the corn two-thirds to three-fourths of the grain fed. I usually give corn for the evening meal, and wheat or barley at noon, or just after the mash is fed in the morning, feeding about half the quantity of either of the others that I do of corn. In extreme cold weather there is less risk in feeding corn exclusively, but I am inclined to think the monotony of an all corn diet exaggerates the troubles likely to follow too heavy feeding of corn. The monotony of any single grain diet may have the same effect; but corn being the lowest priced grain, is probably used alone a hundred times where any other grain is once, hence the effects of lack of variety are seen as many times oftener where corn is used. The extra cost of feeding wheat or barley is not more proportionately now than usual, and there is no doubt in my mind that in nearly all cases it is amply justified in the better health and prolonged productiveness of the fowls, even if short term comparisons showed no advantage in egg production. One guess is probably as good as another as to how long high prices of grain will hold. There is a shortage of production this year, and that fact will tend to increase holding for high prices, and this artificial influence may have greater effect than the natural. Personally, I anticipate a rather high range of prices all year, unless something unusual happens to bring them down.

Capons. (C. E. F.)—"I have a flock of caponized birds. The oldest are White Plymouth Rocks, and weigh now about six pounds each; the rest are R. I. Reds, and from later hatches. I propose to crate feed these birds, and turn out a first class table fowl. This is my first season in the north. I have been engaged in the business in the south. When would you advise my beginning to crate feed in order to put them on the market at a time when I may expect a good price? I expect to send them to Boston. Is it reasonable to suppose that some retail poultry dealer with a good class of trade would buy them from me direct—or must I send them to a wholesale dealer to sell on commission? Any information on the marketing question would be acceptable, and I would come to Boston and talk with any reliable firm you can put me in touch with. Will cold water interfere with getting capons in condition in room without artificial heat? Where can be bought the regulation trade boxes for packing? Also the pasteboard boxes for sending one or two birds in for family trade?"

With grain at present prices — and no

indications of any considerable decline — it is a good general rule to turn off market poultry as fast as possible. The Thanksgiving and Christmas markets should give Mr. F. his best opportunities, though as everyone who has ever sold poultry knows, weather conditions and extra heavy receipts sometimes operate to cut prices at those seasons, especially for irregular shippers. Perhaps the best way in this case would be to begin to feed the older capons at once, and make arrangements with a buyer to either take them when they have reached their limit by crate feeding, or notify the shipper when they can be handled to best advantage. Most buyers like to know of lots of poultry available in case of an unexpected shortage in receipts, or a special demand. The firms advertising for poultry in this paper are reliable. Crate feeding can be done to advantage for only ten days or two weeks with many chickens, but some will stand it longer. It should be discontinued as soon as the appetite begins to fail. The cramming process may be used for some days after that. Cool weather is generally more favorable to fattening than warmer weather, for the fowls' appetites are better, and they also stand the heavy feeding longer. Boxes such as are used by regular poultry shippers are heavily built, and returned after each shipment. I don't know of anyone making a specialty of building such boxes—think each shipper has his own made. Paper boxes would have to be made to order. They could be procured from any paper box manufactory doing a general business.



hatched in both machines were toe-marked and reared in a Prairie State Brooder. The vast difference in death loss—10 percent and 50 percent—conclusively proves that chicks hatched in a Prairie State machine have far more vitality, vigor and strength than those hatched in others. This is a mighty important feature—a dollar-and-cents item to you,

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Very truly, R. C. YEOMANS.

are the most efficient machines made. The reason is simply because we have delved deep into the problem of hatching and rearing as it is accomplished by Nature herself, and then built our machines in a way that produces the same condition as near as it is possible to do so. That's the real secret of their success—they are nature-like machines. We have just issued an advance folder which will interest you. Send for a copy and your name will be entered on our mailing list for a copy of our regular catalog, which will be ready to mail very shortly. Why not get the best? It is the cheapest.

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"1.—One hundred pounds wheat bran; 100 lbs. ground wheat; 100 lbs. ground oats; 100 lbs. corn meal; 50 lbs. beef scraps. Wheat and oats fed in the litter at noon and morning also; if fed in hopper, corn at night.

"2.—Two hundred pounds wheat bran; 100 lbs. wheat middlings; 100 lbs. corn meal; 50 lbs. beef scraps. Grain fed as in first mixture.

"3.—Two hundred pounds wheat bran; 100 lbs. wheat middlings; 100 lbs. gluten meal; 100 lbs. corn meal; 50 lbs. linseed meal; 100 lbs. beef scraps. Grain fed as in the other mixtures. How soon ought pullets and hens begin laying so as to give an average egg yield during the winter? Until a short while ago I fed a mash in the morning, but changed to hopper feeding, but my fowls eat much more by latter method, and I fear they will get too fat; on some days they eat more than on others. Which method do you think best for a beginner?"

If I were feeding the mash wet I would prefer the first mixture described; if a dry mash, the third. The second contains too large a proportion of bran and middlings. The third mixture, if used wet, would probably scour the hens. The question as to beginning of laying and average egg yield cannot be answered as stated, for the two points involved are not necessarily closely related. Other things being equal, the hens that begin to lay earliest in the winter make the best record for the winter; but often hens start well, and lay poorly during the coldest weather.

To Make \$4,000 or \$5,000 a Year. (J. F. E.)—"I have often wondered if an active energetic, educated man were to embark in the poultry business, specializing on eggs alone, in a country where porous soil could be obtained for from \$25 to \$40 per acre, less than three miles from a shipping point, on good pikes, who has the ability to hatch 85% of fertile eggs in incubators, and who knows how to get 85% to 90% fertility from his Leghorn

Lost Feathers

Feathers on the ground and dropping from sleepy, droopy, half-sick hens—that's moulting time, when egg production usually ceases.

Mr. Poultryman, it's now up to you to restore the weakened hens to normal vigor and put them in proper trim for a large egg yield through the coming winter. Give them each morning

DR. HESS Poultry PAN-A-CE-A

In the warm mess. It vitalizes and "tones" the drooping bodies, aids digestion and carries off the clogging poisons that weaken and debilitate the hen. Thus it shortens the moulting season and hastens the return of productiveness. Poultry Pan-a-ce-a is the prescription of Dr. Hess (M. D., D.V.S.). It makes hens lay, market fowls fat, chicks grow fast and also wards off all poultry diseases. Endorsed by leading poultrymen and sold on a written guarantee.

Costs a penny a day for 30 fowls.

1½ lbs., 25c., mail or express, 40c.; 5 lbs., 60c.; 12 lbs., \$1.25; 25 lb. pail, \$2.50.

Send 2c. for Dr. Hess 48 page Poultry Book, free.

Dr. HESS & CLARK, ASHLAND, OHIO.

Instant Louse Killer
Kills Lice.



Your Poultry Profit

can be kept up right through the winter if you feed your hens right and keep them warm. Our book, "Making Poultry Pay," tells how to feed them. The way to keep them warm is to roof and side your poultry houses with

REX FLINTKOTE ROOFING

It is absolutely water-proof and wind-tight. It is non-conducting and keeps a poultry house warmer in winter and cooler in summer. It will resist fire. It is easy to put on. It will last for years—cheaper in the long run than the cheapest you can buy. Be sure you "Look for the Boy."

OUR FREE SAMPLES

will convince you. Send for them and our booklet on roofing; also 4 cents in stamps for our book, "Making Poultry Pay."

J. A. & W. BIRD & CO.
53 India Street, Boston, Mass.
Agents everywhere

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Breeders for sale at Reasonable Prices.

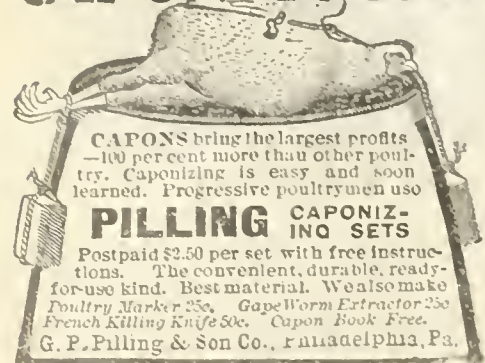
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\$5 NO MONEY IN ADVANCE

The "Dandy" is the easiest operated, best built, fastest cutting green bone cutter made. Sold on 15 days free trial with AND UP a broad guarantee. If it suits keep it, if not, send it back. Free catalog. Stratton Mfg. Co. Box 116, Erie, Pa.



CAPON TOOLS



CAPONS bring the largest profits—100 per cent more than other poultry. Caponizing is easy and soon learned. Progressive poultrymen use

PILLING CAPONIZING SETS

Postpaid \$2.50 per set with free instructions. The convenient, durable, ready-for-use kind. Best material. We also make Poultry Marker 25c, Capeworm Extractor 25c, French Killing Knife 50c. Capon Book Free. G. P. Pilling & Son Co., Philadelphia, Pa.

stock, and who can raise 85% to 95% of the chicks hatched, could make a profitable business out of it, say after the second or third year, and how many hens would he have to maintain to make \$4,000 or \$5,000 per annum, and for perpetual results how many would it be safe to have to each acre? I know this is a good question to impose on any man, but I am deeply interested, and would like to hear what you have to say."

It seems to me that a man who knows how to get such results in fertility, hatching, and rearing chicks, knows more about what he is likely to be able to do with poultry in any given situation, than I or anyone else can tell him. But the question that naturally comes up in my mind is: On how large a scale and for how long a period has Mr. E. got such results as he describes? If he has done it for a long period of years, and on a considerable scale, he should be able to make a very fair estimate of what he can do. If these figures are for a short period or small operations, I would take exception, provisionally, to the statement that he knows how to do the things specified. He may, but the proof is at present insufficient. One of the commonest occurrences in poultry culture is good results at the beginning, not maintained in later experience, or on a large scale.

The number of hens that can be kept continuously on an acre of ground varies. We know—by the light of reason—that this must be so, but definite figures for long periods of years are rarely procurable. Mr. F. W. C. Almy, in his address to the Boston Suburban Poultry Club, at a recent meeting, stated that his stock of hens, about 1,800 in number, occupied about eleven acres of ground. That is about 160 hens to the acre. But the same ground has not all been continuously in use. I think there is but one field in which the hens have been kept continuously since he began some sixteen years ago, and that, as he explained, was a field so located that the rains flooding and flowing over it, washed away impurities at frequent intervals.

To make clear of all expenses \$4,000 or \$5,000 a year on market eggs, is something that I do not think has ever been done, and in the present state of knowledge, of the labor question, and of grain prices seems not likely to be done for some time. Occasionally it is reported that a poultry farm is earning in excess of \$5,000 a year, but without any wish to unjustly discredit such claims, I must say that past experience warns me to be very slow to accept them as trustworthy. Some of the largest duck farms may make more than that, and it is possible that for a single year occasionally some of the other kinds of poultry farms have made well up to or over \$5,000, but claims of that kind are rare, and satisfactory evidence more rare. The most seemingly trustworthy accounts of large profits come not from farms in operation two or three years, but from those which have been long established. One of the most prosperous poultrymen I know, one who has been in the business since boyhood, and is now in early middle age, told me a few months ago, that it was only within very recent years that he had reached the point where he did not have to carefully consider personal and family expenditures. To get to that position, he had for many years to save every dollar possible, and put it right back into the business. If Mr. E.'s success so far has been such that he is encouraged to go into the business on a larger scale, I would not for a moment discourage him, but I would urge him not to count on a too rapid rise to such an income as he mentions.

S. C. and R. C. R. I. Reds. (J. F. L.)—"I got 200 R. C. R. I. Red eggs from a breeder last spring. About ten per cent of them are single combs. Is this possible, or were the eggs mixed? I have some very choice cockerels from these eggs. Would you advise me to mate them with

the pullets from the same eggs, or had I better get other cockerels not related?"

It is entirely possible. In fact almost all stocks of rose combed fowls in the American class throw some single combed chicks. There should be no occasion for introducing new blood immediately.

Clover Silo. (R. N.)—"Did you ever hear of making a clover silo to feed hens on during the winter? I have heard that it makes an ideal green food, but I would like to hear expert opinion before trying it."

I have heard of its being done, and giving satisfactory results in one or two cases, but most poultrymen find it easier to dry the clover and feed it either dry, steamed, or in the mash.

Which Breed? (F. B. S.)—"May I ask information as to relative merits of the following breeds, and which you would advise a beginner to adopt: Anconas, (I think they are called), White Rock, White Wyandotte, White Minorca, or White Leghorn?"

That depends on what the fowls are wanted for. The Rocks and Wyandottes belong to what is called the general purpose fowls; the others to the "egg breeds." Where both eggs and meat qualities are important, the Rocks and Wyandottes are usually preferred, particularly if brown eggs are wanted and much table poultry is to be marketed. Where white eggs are wanted, and the poultry is for home consumption, Leghorns, Minorcas, or Anconas are all good. In laying qualities they are about equal. The Minorca is larger than the others. To many the mottled black and white of the plumage of the Ancona is not as attractive as the pure white plumage of the White Minorca and White Leghorn.

Lice Powder. (J. S. McC.)—"What is a good lice powder and liquid?"

There are many good powders and good liquid lice killers on the market. Almost every supply concern makes its own special brand, and many of the large manufacturers of disinfectant goods make articles of this class which are on sale almost everywhere. The good ones are so many that to name all would be impossible, while to give a partial list would be unfair. I would refer Mr. McC. to our advertising columns.

Whitewash. (J. S. McC.)—"Is there anything that can be mixed with whitewash so that it will not rub off?"

There are several ways of making whitewash that will not rub off. The simplest is: Slake in boiling water one-half bushel of lime, and strain; add to this two pounds of sulphate of zinc and one pound of salt dissolved in water.

A Pair. (E. H. Q.)—"What constitutes a pair when the term is applied to poultry?"

A male and female of the same variety, and generally, when exhibited in pairs, of about the same age—that is, either both young or both adults. When mated in pairs for breeding, age is not considered as when exhibiting. I might add that the custom of exhibiting in pairs is on the wane even at agricultural fairs where it has been chiefly practiced.

Mediterranean Fowls as Winter Layers. (Inquirer.)—"I have repeatedly seen statements in poultry papers and books to the effect that the Mediterranean breeds are not, as a rule, reliable winter layers. It is alleged that their feathering is so thin that they are not able to withstand the zero temperature which generally prevails north of the Ohio river. Upon this important point I would like to know whether the experience of those who have kept Black Minorcas is to the effect that they are not reliable winter layers. If they are not good winter layers, I do not understand why prominent Black Minorca men, Northrup, Andrus, et

LIGHTNING
WHITEWASH SPRAYER NO. 28
Whitewash your poultry houses and stables easily, rapidly, with the "Lightning" Whitewash Sprayer. Kills lice and vermin. Can't clog. Also for spraying trees, washing wagons, etc. Double action pump sprayer. 16 inch. Has 54 ft. heavy hose, extending reel, spray nozzle, steel stirring bar, rubber hose, 5 ft. long. Guaranteed. Price, \$2.50. Cash with order. Exp. post. Agents wanted.
D. B. SMITH & CO., UTICA, N. Y.

EGG MAKING
is a hen's natural work. Cut bone is the raw material she needs to make her lay an egg a day. A CROWN BONE CUTTER will prepare the food from scrap bones quickly, easily. Write for catalog—tells about the Crown.
Wilson Bros., Box 648, Easton, Pa.

See that Cap



This patented rust-proof square steel cap is supplied only with

Paroid Roofing

Other ready roofings are laid with cheap, round caps, cut from scrap tin that soon rust out and destroy the roofing

Paroid Rust-Proof Caps

cannot work loose. They have large binding surface and add years to roof life. The rust-proof cap added to other superior features, makes Paroid the best ready roofing ever laid on a building.

To let you test and prove Paroid's superiority we make this

Money Back Guarantee

Buy one roll of Paroid, apply it to your roof. If you are not then satisfied that you have the best, we will send you a check for the amount paid for the roofing and the cost of applying.

Ask for Free Samples of Paroid, Rust-Proof Caps and name of our Paroid Dealer. If you care for our Book of Plans for Farm Buildings, enclose four cents for postage.

F. W. BIRD & SON, Makers,
Established 1877.

18 Mill St., East Walpole, Mass.,
1418 Monarch Bldg., Chicago, Ill.
The originators of the complete roofing kit and the Paroid rust-proof cap.



World Famous Egg Farm

Our Literature is Free for the Asking.

LAKEWOOD FARM COMPANY,
LAKEWOOD, NEW JERSEY.

O.K. Poultry Food
IS OK
The great conditioner for fowls—greatest egg-maker known. Makes hens lay—keeps them healthy, active; cures and prevents disease. Send 10c. for sample.
O. K. Stock Food Co.
624 Monon Bldg., Chicago, Ill.

Death To Lice
is just as effective as a sword thrust. Harmless to poultry and stock but death to the louse and his family. It is the old-time Lambert's Death to Lice—the sure killer of vermin on poultry, stock, sheep or plants. Sample postpaid 10c. 100 oz. by express \$1.00. Ask for "Pocketbook Pointers." Sent free and worth many times the trouble of sending a postal for it. Write today.
O. K. Stock Food Co.
624 Monon Bldg., Chicago

O. K. ROUP REMEDY
Checks roup at once. Just as soon as you see a case in your flock give O. K. Roup Remedy as per directions. It rarely fails to give immediate relief. Relieves Colds, Canker, Catarrh, Asthma in poultry, pigeons or song birds. This remedy is guaranteed, and perfectly safe to use. Sent postpaid for 50cts.
THE O. K. STOCK FOOD CO.,
624 Monon Bldg., Chicago, Ill.

al., who live where the mercury frequently goes far below zero, are so successful with this breed. Do such men furnish artificial heat to their fowls, so as to promote winter laying? Information upon this important subject will be greatly appreciated by me, as well as doubtless by many others who have a fancy for Minorcas."

Fowls of the Mediterranean class will not, as a rule, give fair to good egg yields as steadily through the winter as the heavier breeds. They are more susceptible to cold, not because the plumage is thin, but because the combs are large and easily frosted, and, to some degree, because they are less likely to carry fat which would help to keep up the egg production in extreme cold weather when the food that could be digested and assimilated would not alone suffice for maintenance of the fowl and egg production at the rate which had perhaps obtained during more moderate weather. But while it is generally true that fowls of the Mediterranean class are likely to be more uncertain winter layers than heavier fowls of no better actual laying capacity, it is also true that many breeders of Mediterranean fowls get good egg yields right through the winter; and while some I know of use artificial heat, others do not. In either case, I think the most ardent advocate of the Mediterraneans would admit that they required a little more careful attention to prevent too great exposure to the cold than fowls of the American or Asiatic class. When I was running a poultry plant primarily for eggs, I kept about as many Leghorns as Americans and Asiatics combined. Under the same conditions the Leghorns laid fewer eggs during the winter than the others, but more in the summer. The summer eggs were just as profitable, and I got a steadier yield from the flock as a whole than if I had kept only one type. Without reference to the laying qualities of their Minorcas, it may be said that the men mentioned by Inquirer are first of all fanciers, and breeders of fancy fowls, and winter egg production would naturally be a secondary point with them. The fact that they keep Minorcas does not necessarily show that Minorcas are good winter layers, for a fancier who has that class of birds to sell at fancy prices need not concern himself much about winter egg production.

Ration. (B. J.)—"Will you kindly give your opinion of the following winter ration for White Wyandottes?"

Daylight—full feed of whole corn in litter; 10 A. M.—wheat and oats in litter; Cyphers laying feed always before the birds in hoppers, as is also beef scrap, shells, charcoal, grit, green food consisting of cabbage or scalded short cut alfalfa fed daily? What are the disadvantages of a dry feed system? Is it better practice to separate the beef scrap in the hoppers, or mix same with the ground grains? Why?"

With hoppers of "laying feed" always before the fowls, the better plan would be to feed the wheat and oats in the morning, and the whole corn just before the hens go to roost. When whole corn is used for one feed a day it is generally preferable to give it in the evening. In this instance if the whole corn was fed at night the wheat and oats could be given at the same time, and would not be eaten until the next morning. The principal disadvantages of the dry feeding system as I see it in practice is the waste of food. Experimenters with food hoppers have made a number of different styles of hoppers and troughs to overcome this, but not, so far as I have seen, with uniformly good results. The most marked disadvantage that I discover through inquiries addressed to me as to causes of trouble in flocks, is that dry feeding, having a tendency to counteract looseness of the bowels, seems to prevent that common symptom of digestive trouble appearing until the conditions become very serious. A large number of such cases were brought to my attention last winter and spring. This tendency of dry feeding makes it possible to use in dry mashers, without apparent bad results articles like fish scrap, which in wet mashers cause fowls to scour badly, and also to use much larger proportions of beef scrap than can be fed in a wet mash, or would be eaten voluntarily by the fowls if fed separately to fowls fed wet mash. This extra heavy feeding of animal food appears to be for awhile ef-

fective in forcing both growth and egg production, but from the number of instances of that kind reported to me I am inclined to think that it "burns out" the digestive organs. Such results probably would not occur if proper means were taken to prevent them. If fowls were kept liberally supplied with green and succulent food they would be likely to balance up their ration so that no ill effects would follow. But if there is a general shortage of such foods, or if the supply is intermittent trouble develops. We may say that the poultryman ought to supply such foods in sufficient quantities and regularly, but the fact always has been, and I presume always will be, that the majority of poultry keepers do not provide the meat and vegetable (especially the vegetable) accessories of the grain diet of fowls as they should, and wherever this is the case dry feeding will give good results only temporarily.

Mr. G.'s third question I am not prepared to answer at present. The point has not been observed carefully enough to give any positive conclusions.

Pheasants, etc. (J. S. McC.)—"Are pheasants easily raised? How much room does a pair need? Do they stand transportation well from one show to another? Is there money raising them? Why are they not raised more? Is the Golden pheasant a good variety? Are canary birds easily raised? Is it profitable raising them?"

Most people who try pheasants are not very successful with them. A few I have known have had excellent results. One lady's pheasants did well when she gave them her personal attention, but not at all well for the man who looked after her poultry. A pair of pheasants would require a run at least several rods long. They seem to do better in long narrow runs, probably because they can get to a distance from a visitor which they feel is safe easier in such a run than in one of the same area that was nearer square. They have to be kept in a covered run, and not many people will be overgenerous with yard room if they have to wire it overhead, so the long narrow run seems the most economical and at the same time best for the birds. Their runs should be shaded, and should also be as secluded as possible. There is a good profit in raising them if one is successful, but they cannot be grown in confinement with large numbers together; hence it is advisable not to undertake a large production. They work in well with poultry when the location is

favorable. Golden pheasants are a handsome variety, and one of the most popular. They are rated more difficult to breed and rear than the Silvers, but they bring much better prices. I am not able to give the correspondent any information about canaries.

Fowls for the Canal Zone. (H. J. M.)—"I am going in the poultry business in Columbia in the canal zone. The thermometer stands between 80 and 100° the year round; the days are hot, the nights cool. I will thank you very much if you will kindly tell me what would be the best breed of fowls to take with me. I want a fowl for market, and a fowl for eggs."

Generally fowls of the Mediterranean class are best suited to hot climates. The average fowl of this class is not a good table fowl, but many stocks of all the Mediterranean breeds are bred for good size and weight, and such stock makes fair table poultry for all purposes but large roasters.

Winter Rations. (E. A. H.)—"We intend to winter about 300 pullets—Reds, B. Rocks and White Leghorns. Will you kindly tell us what change you would make in the following ration? The birds are on free range, and since they were three months old have been fed a morning mash composed of equal parts corn meal, wheat bran, and wheat middlings, with eight or ten per cent beef scrap added to the mixture. For hard grain a mixture of three parts corn, two parts barley, and one part wheat. The hard grain is kept in slatted troughs to which the birds have access at all times. We cannot get barley at the present time, and have substituted oats, which the birds do not like. They throw them out of the feed boxes, and leave them lying on the ground. Some of the Rocks and Reds have begun to lay at five and one-half and six months old. We would like to feed cut alfalfa in the mash later when the green grass is gone. Will you kindly tell us how much should be added to the grain mixture? What change would you make in the ration for Reds, Rocks, and Leghorns?"

When alfalfa is to be used in the morning mash it may be made about half of the bulk of the dry ingredients of the mash—that is, use as much in bulk of finely cut alfalfa or alfalfa meal as of all other dry ingredients. The use of slatted troughs for the grain for the fowls is not likely to work well for long after the fowls

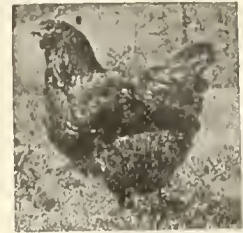
(Continued on page 449).

WHITE WYANDOTTES.

The Triumph Strain has a national reputation for beauty, utility, and especially for heavy laying of large brown eggs.

A few extremely fancy cockerels for sale. They are farm raised, large, vigorous, shapely and white. Also, a few R. I. Red cockerels, bred on another farm. They are from a heavy laying strain, and will please you.

W. E. MACK, West Woodstock, Vt.



Champion S. C. Black Orpington Pullet, 1907.

CHAMPION S. C. BLACK ORPINGTONS

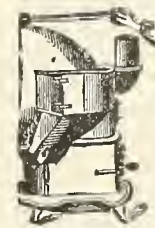
Winners at all the big 1907 shows, including New York. Will now dispose of my 1907 winners, also some fine 1908 prospects bred from best matings. Good birds that will win at small shows, and utility stock for sale at reasonable prices.

FOXHURST FARM, Lime Rock, Conn. R. N. BARNUM.

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Fourth Annual Show of South Jersey Poultry Ass'n will be held from November 27 to 30th. Cash Premiums all varieties. This will be a show of quality. Send for Premium List. Show will be cooped in our New Empire Coops. These coops for rent to other associations.

B. B. WARE, Show Sec'y, Bridgeton, N. J.



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With Dumping Caldron. Empties its kettle in one minute. The simplest and best arrangement for cooking food for stock. Also make Dairy and Laundry Stoves, Water and Steam Jacket Kettles, Hog Scalders, Cal-drons, etc. Send for circulars. D. R. SPERRY & CO., Batavia, Ill.

Jos. Breck & Sons, Agents, Boston, Mass.

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To write for Premium List of the Northampton Poultry Ass'n Show

Nov. 26, 27, 28, 1907.

D. J. SIMISON, Sec'y, Northampton, Mass.

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Strong enough for stock
Close enough for chicks

"PITTSBURGH PERFECT"

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POULTRY & GARDEN FENCE

The one-piece wire fence without wraps or twists to crack galvanizing or cause rust.
Practically indestructible. Extremes of weather do not loosen or otherwise affect it.
Perfectly adaptable to hilly or uneven ground.
At every contact point wires are welded together uniting the wires perfectly into one piece. Strongest, smoothest, neatest construction known.

BE SURE YOU GET THE IMPROVED

REGULAR—Top and bottom wires No. 10, others No. 13. HEAVY—Top and bottom wires No. 9, others No. 12.
Electrically welded fences for all purposes made by
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BANTAMS, Buff, Wh., Black Cochins; reasonable; show specimens. Chas. Fisk, Middletown, Ct.

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ALL BREEDS of live pure bred poultry, pigeons, pheasants, turkeys, rabbits, Belgian hares, cavies, dogs, cats, and all pet stock. A complete list in our large bird catalog. Excelsior Wire and Poultry Supply Co., Dept. 1, 25 and 28 Vesey St., New York City.

DISAPPOINTED—That is what you will be if you don't get some of our Barred Plymouth Rocks and White Wyandottes. We have a splendid lot of yearlings and young stock of the highest quality for sale, and will give you a square deal. Crystal Poultry Farm, R. F. D., Washington, N. J.

BUFFINGTON'S BIRDS, Buff Plymouth Rocks and Columbian Wyandottes, Buff Leghorns, Rose Comb Buff Orpingtons, and S. C. White Orpingtons, 1 Buff Brahma cock \$2. Rowland G. Buffinton, Somerset, Mass.

COCKERELS AND PULLETS, April hatched, well matured W. Wyandottes, W. Leghorns, and R. I. Reds; great laying strains, \$2 each; \$3 for \$5. Geo. S. Bowen, Eastford, Conn.

BARGAIN—pure bred White Rock breeders, \$1.25 each; all vigorous. E. L. Taylor, Chatham, Mass.

WHITE Wyandottes, S. C. White and Black Leghorns, cockerels and pullets; 300 breeders at summer prices. We need the room; if you want stock write quick. Christy Farm Co., Cortland, N. Y.

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CHARCOAL \$1.50 per bbl., freight prepaid to any station east of the Mississippi river. Six sizes to choose from; write for samples. Thomas Bros. Co., Beach St. and Columbia Ave., Philadelphia, Pa.

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CHARCOAL, in any quantity. W. P. Potter, 157 Plainfield St., Prov., R. I.

POULTRY Charcoal only \$1 per ton; samples free. U. B. Charcoal Co., Bridgewater, Mass.

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BUFF COCHINS EXCLUSIVELY—Golden Buff, heavily feathered, perfect shape. Prizes right. Write wants. Harvey J. Miller, Tipton, Pa.

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COLLIE pups from imported stock, \$5; trained Collie female \$15; trained Setter, \$15. April Bronze turkeys, \$2. L. Bennett, Hollins, Va.

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INDIAN RUNNER DUCKS, young stock for sale. A. S. Aldrich, Westboro, Mass.

FOR SALE, two hundred first class Pekin ducks, suitable for breeders. Price in lots of ten or more, \$1 each. Fishers Island Farm, Fishers Island, N. Y.

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5000 ferrets, stamp for list, book and prices. Levi Farnsworth, New London, Ohio.

10000 FERRETS from selected breeders. Perfect workers. They exterminate rats, drive out rabbits; 48¢, blue'd book and price list free. Sam. L. Farnsworth, Middletown, Ohio.

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TOULOUSE geese, and Pek. ducks; winners Mad. Sq.; stamp. Webster Kuney, Seneca Falls, N. Y.

GINSENG.

GINSENG, 1000 new Ginseng seeds for sale at \$9 per 1000. Address Geo. L. Cobb, R. F. D. 2, Thompson, Pa.

GUINEAS.

500 PURE PEARL Guineas, must be sold before Xmas. Rare opportunity to purchase the breeding stock for next season; \$2 pair; \$2.75 per trio; \$8 per dozen, properly mated. Catalogue free. Pioneer Guinea Farm, Marietta, Ohio.

HOUDANS.

NICE HOUDAN cockerels, \$2 each. Fairland Farm, Iridgewater, Vt.

JAVAS.

BLACK Java cockerels and pullets, due stock for sale. G. M. Matthews, Brocton, N. Y.

LANCSHANS.

BLACK Lancshans, exhibition calibre and high class breeders only. H. Singhofen, Oberlin, O.

LEGHORNS.

400 S. C. White Leghorns, hens, pullets, cocks and cockerels; heavy laying strain, and large size birds, as good as the best. Write now. Eggs \$4 per 100. C. A. Stevens, Box 3, Wilson, N. Y.

4000 S. C. W. Leghorns, large, healthy, fine bred, white birds, bred for heavy egg production; breeding, and utility stock, and eggs for hatching for sale at fair prices. Belle Hill White Leghorn Range, Elkton, Maryland.

S. C. BROWN Leghorns from this season's breeding pens. J. R. Hatch, Cliftondale, Mass.

R. C. White Leghorns. Show, breeding and utility stock; prices right. Jas. Holden, Addison, N. Y.

R. C. Buff Leghorns, 12 yearling hens and cockerel, \$10. F. T. Smith, Salisbury, Mass.

S. C. Black Leghorns, 18 hens, one and two years, with cock \$20. G. H. Selleck, Exeter, N. H.

R. C. White Leghorns, pure white breeding cock's, only \$1.50 each. Walter Hurd, Elkland, Pa.

S. C. W. Leghorns (Wyckoff's) \$1.50; write me; Game fowl. Dr. Wight, Harrison, Me.

S. C. White Leghorns, 22 hens and 2 cocks, \$20. H. J. Roberts, R. D. 2, Monongahela, Pa.

SPECIAL sale S. C. W. Leg. pullets from heavy layers and weathers; well developed June hatch. Emory E. Banks, Creekside Place, E. Pembroke, N. Y.

VERY choice cock's, W. Leghorns, W. Rocks, \$2; also hens. C. B. Travis, Brighton, Mass.

COMMERCIAL POULTRY YARDS, Arcade, N. Y. 1500 grand S. C. White Leghorn yearlings, pullets and cockerels; the kind you want at prices you can stand. "Mason's Leghorns are the large ones," very hardy and great layers. Returnable at my expense if not satisfactory—that's fair. Illus. cat.

LICE PAINT.

ONCE A YEAR LICE PAINT will keep houses, brooders, etc., free from mites if used once a year; 50¢ gal. Woodsdale Poultry Plant, Summit, R. I.

MINORCAS.

1000 Minorcas, best quality, 28 page cat. Geo. H. Northup, R. F. D. 2, Raceville, N. Y.

BLACK Minorcas. Young stock for sale. R. Story, 187 Arlington Ave., Brooklyn, N. Y.

100 R. C. Black Minorca cock's, 50¢, np; stand and bred. Weaver's Egg Farm, Liverpool, Pa.

ROSE Comb Black Minorca cock's for sale. Eggs in season. M. J. Quackenbush, Nutley, N. J.

ORPINGTONS.

BUFF, BLACK, AND WHITE Orpingtons. S. C. Choice young stock for sale. Can furnish winners for any show. Emil Doeber, Wallingford, Ct.

S. C. BLACK Orpingtons. Want a winner? Then send for bargain prices and free photos, and see what I have to offer. W. E. Matthews, Box 474, New London, Conn.

BLACK Orpingtons, grand in size, shape, vigor. Splendid prize winning qualities. Clean sweep at Housatonic fair this fall. Stock for sale. L. S. Higgins, or Roy L. Davis, Gt. Barrington, Mass.

PIGEONS.

UNVARNISHED facts about squab raising, for stamp. W. G. Todd, East Bridgewater, Mass.

GUARANTEED mated Homers. Fast breeders, producing squabs market looking for. Write for circular. Eastern Homer Co., Beverly, Mass.

FOR SALE, twenty pair common and twenty pair white pigeons. Chas. L. Fisk, Middletown, Ct.

FOR SALE, Homing pigeons, finest breed of thoroughbred Plymouth Rock—large, strong, and healthy. Address R. V., 881 Ocean Ave., New London, Conn.

PLYMOUTH ROCKS.

BUFF Rocks exclusively; fine birds. Sold in color. T. D. Schofield, Woodstock, N. H.

BUFF ROCKS ONLY, winners Madison Square, '07; Boston, '08, '09, '10. Fine stock reasonable. Noye, New London, Conn.

BUFF ROCKS, winners of 100 premiums in three years; sold in color; stock and eggs. Dr. Goudage, Bristol, N. H.

BRED TO LAY Barred Rocks, trap nested 5 generations, 200 eggs; 200 cockerels for sale. The male is half your flock; you can well afford to put a few dollars in one of these birds; send for free booklet and be convinced; tells how we breed, house, and feed. L. R. Black, Route 3, East Holden, Maine.

FISHER'S White Rock cockerels, pullets, also best dry feeders; cir. Pattison, Greenland, N. H.

BARRED Rocks, yearling hens, Bradley-Thompson str. Miss H. A. Heaton, Ballston Lake, N. Y.

FOR SALE, 50 early hatched White Plymouth Rock pullets, bred to lay and win, \$1 each. A. W. Payne, Charlemont, Mass.

EXCELSIOR. Stop, look, listen: 200 Excelsior White P. Rocks, bred to win. Money can't buy better. S. A. Bates, Westboro, Mass.

PRINTING.

POULTRY POST CARDS, beautiful illustrations, 15¢ per dozen, assorted or all one kind, 1/6 with your advt. \$1.50; 50¢, \$3.50; sample free; other printing for poultrymen reasonable and up to date. Fink & Sons, 14 South Fifth St., Philadelphia, Pa.

RED CAPS.

ENGLISH Red Caps, hardy, vig. cock's \$2 and \$3 each. C. L. Puder, 104 Orange Ave., Irvington, N. J.

RHODE ISLAND REDS.

RHODE ISLAND REDS, winners of 1st prizes, Boston, New York, Philadelphia, Rochester, and Cincinnati. Eggs at \$2.50 per 10; special matings at \$5 per 15. House Rock Poultry Farm, C. M. Bryant, prop., Wollaston, Mass.

EGGS from Shove's Rose and Single Comb Rhode I. Reds and Houdans, \$2 for 13; \$5 for 40; have been breeding them for the last ten years. Also Pekin ducks and Homer pigeons. Be sure and send for circular. A few good birds for sale. D. P. Shove, Fall River, Mass.

1,000 FARM raised Single Comb Reds, bred from large, heavy laying prize winning stock; none better; write your wants; send for circular. John D. W. Bodfish, West Barnstable, Mass.

WHITE Birch Poultry Farm, Bridgewater, Mass. S. C. R. I. Reds, Indian Runner and Rouen ducks. See ad. page 451.

SIDNEY L. BARR, Bridgewater, Mass. Rhode Island Reds; see ad. 4th cover.

100 PULLETS, 50 cockerels, R. C. R. I. Reds, Tuttle strain; breeding and exhibition stock, \$2 to \$5 each, and up. M. B. Gould, Granville, N. Y.

300 SELECTED cockerels, fine show birds and breeders. All stock sold on approval, \$2 to \$50 each. S. Smith, 602 5th St., Brooklyn, N. Y.

200 ROSE COMB R. I. Red cockerels, winners at all northern New York fairs this fall. Fit to show in best of competition. Bay Shore Farm, Gouverneur, N. Y.

AT VERMONT STATE FAIR, White River Junction, Brattleboro, and Springfield, our Single Comb Rhode Island Reds won in September and October, 1907, three first, three second, and four third premiums; 200 selected range grown cockerels. Brookside Poultry Farm, Bellows Falls, Vt.

S. C. REDS, choicest in exhibition, breeding, utility; winners Gloversville, Schenectady, N. Y. state fair; grand cock's \$1 to \$5; breeders \$2 ea.; utility pullets \$1 to \$1.50. Wm. Phillips, Jr., Amsterdam, N. Y.

R. I. REDS, choice cockerels and pullets from \$1 upwards. Durgin Bros., Exeter, N. H.

ROSE C. Reds, special A No. 1; never disqualified to the Standard. H. Singhofen, Oberlin, Ohio.

HIGH CLASS Single Comb R. I. Red cockerels and pullets; selected from 1900 raised this past season. I can furnish breeding and exhibition stock at reasonable prices, that are the production of years of fine breeding from winning ancestors. Frank D. Read, Fall River, Mass.

REDS WORTH BUYING. "Old Acres," Wrentham, Mass.

CLARK FARM, Concord, Mass., will breed only Rose Comb Reds hereafter. Entire stock of choice Single Comb breeders and young stock for sale at a bargain.

TRAP NESTS.

THE PRACTICAL, accurate, compact, simple, easy, inexpensive. M. J. Whitty, Malden, N. Y.

IDEAL Trapnest specialties are the standard; cir. free. Frank O. Wellcome, Yarmouth, Maine.

TURKEYS.

100 BRONZE winners A. P. A. show, Auburn; stamp. Webster Kuney, Seneca Falls, N. Y.

WANTED.

WANTED, POSITION by practical poultryman. Has thorough knowledge of the business; successful, reliable, temperate, and has good executive ability; twenty years experience; excellent references. Address S. H. Jackson, P. O. Box 352, Port Huron, Mich.

WANTED POULTRYMAN, married, who is thoroughly competent in all branches, to take entire charge of small plant thirty miles from New York. Give experience, references, and salary expected in first letter. Address W. G. Dunham, Box 54, Spring Valley, New York.

WANTED, position by poultryman who is thorough specialist in raising Pekin ducks for market. Will put his years of experience against capital. G. L. Downlog, Medford, Mass.

AN OPENING for two students, four months course; 3500 hens, raising 7000 yearly; "Burr" system. For particulars address Belle Hill White Leghorn Range, Elkton, Maryland.

POULTRYMAN 15 yrs. experience, desires position as working mgr. Very successful in hatching and rearing chicks. Reliable and strictly temperate. Best ref. E. H. Crossman, 17 Goslen St., Paterson, N. J.

WYANDOTTES.

WHITE WYANDOTTES, our strains are winners the country over; stock for sale at all times. Barnes & Woodbury, Wrentham, Mass.

SILVER WYANDOTTES, my entire flock of breeders for sale in lots to suit. J. C. Jodrey, Box A, Danvers, Mass.

WHITE cockerels and hens, Dunston strain from \$1 up. H. F. Hallett, Ashfield, Mass.

WHITE W. Ys. exclud. females, \$1.50 np; males, \$2 up; eggs, \$2, 15. Anna Magee, Wyanamie, Ind.

COLUMBIAN Wyandottes. We have some fine stock for sale. Write for particulars. O. F. Black & Son, Jefferson St., Newton, Mass.

SILVER and Columbian Wyandottes. H. F. Chase, Andover, Mass.

PARTRIDGE Wyand. show birds or breeders \$3 up. Testimonials. Fred Parke, Thomaston, Ct.

BUSINESS W. Wyandottes, stock for sale; trap bues used. Michael K. Boyer, Hammoniton, N. J.

WHITE AND BUFF Wyandottes. Big farm raised heavy layers brown eggs. Shape, color, right. Regular winners at leading shows ten years. Stock prices right. C. E. Davis, Warner, N. H.

PARTRIDGE WYANDOTTES, from St. Louis, Madison Square, and Boston winners. First and second pens Vermont state fair, Felch, judge. Loue Plue Poultry Farm, R. F. D. 2, Pike, N. H.

IMPROVE YOUR STOCK by my White Wyandottes. Winners at Brockton, Northampton, and Boston. Breeders \$1.25 each; pullets \$1.75 each; cocks and cockerels \$2.50 np; show birds matter of correspondence. Money back less one-half express charges if not satisfied. E. Harvey, Randolph, Mass.

WHITE WYANDOTTES, fine bred cockerels. Now is the time to buy; prices right. Rhoades Bros., Bridgewater, Mass.

FOR SALE, business White Wyandotte spring stock. Also, 3 Rose Comb Black Minorca cockerels, \$1.50 each. Auruco Farm, Sparta, N. J.

\$5 TRIOS of White Wyandottes first class stock. Sunnyside P. Farm, Ansonia, Conn.

GOLDEN, Buff, and White Wyandotte fowls and chicks for sale. They were raised on free range, and are healthy and vigorous, with fine shape and color. Loren H. Brown, Lanesburg, Mass.

100 WHITE Wyandottes for sale; 23-egg strain; won more prizes than all others. J. S. Gates, Westboro, Mass.

IMPROVE your stock by my White Wyandottes. At Brockton fair, Oct., 1907, won 1 pen, 2 ex. 1, and 1 cock; breeders, year old, \$1.25 each. I am shipping splendid cockerels at \$2.50 up. Money back if not satisfied; look at my birds in Oct. 15th number. E. Harvey, Randolph, Mass.

15 W. W. Ys. cock's, March and April hatch, \$1 each. H. J. Roberts, R. D. 2, Monongahela, Pa.

8 BUFF W. Ys. year. hens, 1 cock, \$15; 10 Part. hens, 1 cock, \$18. Wellsboro P. Yards, Wellsboro, Pa.

We're Getting More Eggs Now



"Since we began feeding to help the hen, we're getting twice as many eggs as we ever got before." That's the way the letters read we're getting every day from people who have adopted LEE'S EGG MAKER for their poultry.

Egg Maker makes more eggs—that's the reason. It furnishes the egg-materials the hen needs, and we guarantee it will increase the egg-yield. It is largely granulated blood (deodorized)—the highest form of concentrated meat food, combined with roots, herbs, spices proportioned and prepared as our years of experience have proven is best and most effective for increasing egg-production. Egg Maker takes the place of meat food at a great saving in cost. One trial will convince you that it will be profitable for you to feed it regularly. Sold by all dealers, or direct by

GEO. H. LEE CO.,
Omaha, Neb.

GENERAL AGENTS:

Howard L. Davis, 1315 Market St., Philadelphia, Pa.; Fiske Seed Co., Boston, Mass.; Robinson Seed and Plant Co., Dallas, Texas; Henry Albers, Los Angeles, Calif.; Portland Seed Co., Portland, Oregon.

LEE'S New England Agents.

H. E. FISKE SEED CO.,
12 and 13 Faneuil Hall Square, Boston, Mass.

To say, when writing advertisers, "SAW AD. IN FARM-POULTRY," will benefit you—please them—and help us.

The Editor's Question Box.

(Continued from page 447.)

are confined. It would be better then to feed all grain in litter and to feed the grain which is eaten least freely at mid-day or earlier, and the corn late in the afternoon. When fowls reject oats it is frequently found that the rejected oats are of very poor quality, mostly hull, with the kernel either very small or not visible to the naked eye.

Bone and Shell. (C. R. McM.)—"Please advise me as to the relative merits of oyster shells and granulated 'junk' bone when fed to laying hens for the purpose of furnishing material for shell building; also would the granulated bone be of any benefit to growing chicks as a frame builder? Which do you consider the better feed for both laying hens and growing chicks,—green cut bone or fresh cooked meat? The meat I can get free of cost in any quantity."

From the fact that hens eat oyster shell more readily and freely than dry granulated bone, it seems reasonable to conclude that it is better suited for the purposes for which the system requires it. I do not at present recall that any scientific demonstration of this point has been made. With me growing chicks have never eaten either oyster shell or dry bone freely, and so I have relied upon green cut bone and beef scrap or animal meal to furnish the animal and mineral foods needed. Green cut bone I consider the best food for the purpose, but of late years have not used it at all in my own yards because it has not been convenient for me to get and prepare it. The advantage of preparations like beef scrap and animal meal which will keep for an indefinite period, and are always ready to use, appeal strongly to poultry keepers who can give little time to their fowls or can do things for them which require more than a few moments only at irregular intervals. But when one can get bone at a reasonable price and prepare and feed it regularly, he is likely to prefer it to anything else. Fresh meat, either raw or cooked, is good—but does not supply the mineral matter green bone does.

SHOWS TO OCCUR.

Corrections.

- Nov. 26—28. Northampton, Mass. Ballou, and Card, Judges. D. J. Shulson, Sec'y.
Nov. 27—29. Denton, Tex. Savage, Judge. C. F. Holmes, Sec'y.
Dec. 3—7. Portsmouth, Ohio. Rigg, Judge. Nate Rickey, Sec'y.
Dec. 4—7. Decatur, Ill. J. B. Burrows, Sec'y.
Dec. 30—Jan. 4. Dwight, Ill. LeDuc, Judge. H. A. Wood, Sec'y.
Dec. 31—Jan. 2. Great Barrington, Mass. S. M. Fox Sheffield, Sec'y.
Jan. 21—28. Philadelphia, Pa. Leslie Jefferis, Sec'y.
Jan. 27—Feb. 1. Bradford, Pa. Webb, and Emmel, Judges. Chas. Stewart, Sec'y.

New Announcements.

- Nov. 25—30. Beaumont, Tex. Ben C. Easton, Sec'y.
Nov. 26—30. White Plains, N. Y. J. D. Harcomb, Sec'y.
Dec. 3—6. Fairmount, W. Va. McClave, Judge. G. C. Starcher, Weston, Sec'y.
Dec. 4—6. McKinney, Texas. Savage, Judge. F. C. Thompson, Sec'y.
Dec. 5—7. Cisco, Tex. Savage, Judge. J. W. Watson, Sec'y.
Dec. 9—14. Guthrie, Okla. Heimlich, Judge. E. B. Henry, Sec'y.
Dec. 10—12. Penacook, N. H. F. G. Blanchard, Sec'y.
Dec. 11—14. Youngstown, O. Feil, and Gault, Judges. Geo. Miller, Sec'y.
Dec. 11—15. Brockton, Mass. Latham, Stafford, Rogers, Benson, Hatch, Forbes, Judges. F. S. Frasier, Sec'y.
Dec. 12—14. Milford, Mass. Lambert, Ballou, George, Tompkins, Judges. W. H. Pyne, Sec'y.
Dec. 16—20. Princeton, Ill. Rapp, Judge. Frank Bryant, Sec'y.
Dec. 16—21. Ephrata, Pa. M. W. Hess, Sec'y.
Dec. 30. Martinsville, Ind. E. E. Pryor, Sec'y.
Dec. 30—Jan. 4. Greenfield, O. Lee W. DeVoss, Sec'y.
Jan. 6—11. Palmyra, O. Denny, Judge. John Lynch, Sec'y.
Jan. 7—10. Clarksburg, W. Va. Lambert, and Cram, Judges. E. M. Wilson, Sec'y.
Jan. 7—11. Knoxville, Tenn. Brown, and Owen Judges. J. T. Oates, Sec'y.
Jan. 7—11. Washington C. H., Ohio. McClave, Keller, Barger, Daibey, Faustlich, Falkner, Judges. J. A. Bush, Sec'y.

FOR SALE.

Hen-house, 8x30 ft., portable, in fine condition 360 egg Model Incubator, 2 homemade Brooders, set of 5 "Superior" trap nests; 30 pure W. Wyandotte hens and pullets, F. O. B., Charlemont, Mass., \$75. Particulars and photo by mail.

G. A. GROVER, Charlemont, Mass.

- Jan. 9—11. Columbiana, Ohio. Emmel, and Early, Judges. G. H. Allcorn, E. Palestine, Sec'y.
Jan. 13—18. Wilkes Barre, Pa. W. L. Higgs, 320 S. River St., Sec'y.
Jan. 14—17. Edgar, Neb. Atherton, Judge. Chas. G. Cottle, Sec'y.
Jan. 15—21. Quincy, Ill. Warnock, Judge. A. J. Mescher, Sec'y.
Jan. 20—25. Waterloo, Iowa. Shaner, Judge. C. J. Schneck, Sec'y.
Jan. 20—26. Milwaukee, Wis. Tucker, and Keeler, Judges. Henry Daniels, Sec'y.
Jan. 26—Feb. 1. Mitchell, S. D. Wm. Scallin, Sec'y.
Jan. 29—31. Clare, Mich. Bloss, Judge. John Northon, Sec'y.

Since the printing of the list in the Oct. 1 issue, the following shows have accepted our offer, and lists of awards will be published in FARM-POULTRY:—
Pontiac, Mich.; Elgin, Ill.; Delavan, Wis.; Blue Island, Ill.; Montpelier, O.; Evansville, Ind.; Breckinridge, Mich.; Mounmouth, Ill.; Bradford, Pa.; Baitte, Mont.; Herndon, Va.; Springfield Fanciers Club, Mass.; Springfield Poultry and Pet Stock Ass'n, Mass.; Woonsocket, R. I.; Meriden, Ct.; Lynn, Mass.; Seranton, Pa.; Milford, Mass.; Decatur, Ind.; Mitchell, S. D.; Guilford, Conn.; Toledo, O.; Lenox, Mass.; Ephrata, Pa.; Penacook, N. H.; Martinsville, Ind.; Paxton, Ill.; Bradford, Pa.; Columbus, O.

Boston Suburban Poultry Club.

The October meeting of the Boston Suburban Poultry Club brought out a good attendance and many applications for membership.

Mr. F. W. C. Almy, of Red Feather Farm, Tiverton Four Corners, R. I., was the speaker of the evening. Mr. Almy, who is one of the most successful and prosperous of the "colony system" poultry farmers of Rhode Island, gave a brief account of the beginning and development of the system on his farm, and a more extended account of the details of the system in his practice. After the first few minutes the speaker was repeatedly interrupted by questions from the audience, as one or another wished some point more fully explained, and this informal discussion continued for the better part of two hours. It would be impossible to give a synopsis of such a discussion, but a few of the points brought out deserve special mention.

Mr. Almy keeps about 1,800 hens. Last year his average egg yield was approximately 130 eggs per hen. About a 50% egg yield is as high as a day's collections ever run, and it has been some years since a day's collection of eggs went below 30 dozen. It is evident from these statements that he has the comparatively steady egg yield—bringing in an income every day in the year, which in practice poultry keepers soon find is better than big yields at one season and no eggs, or eggs in insignificant quantities, at another. How does he do it? He hatches all his spring chickens within a period of about six weeks, then pushes them for all they are worth, and he feeds heavily to

laying stock as well as to growing stock.

The next meeting of the club will be held on Tuesday evening, November 19th; subject and speaker to be announced later. All poultrymen in the vicinity of Boston who can get to the city for an evening meeting should join the club. The membership fee is but \$1 a year, and the member's ticket admits the member to all lectures. Meetings are held in Social Hall, Tremont Temple, the third Tuesday of each month, at 7.30 P. M.

A Grand Show Assured.

According to its secretary, Mr. O. H. Quentin, Clifton, N. J., the coming Paterson, N. J., show will be a "capacity" show, meaning, presumably, that the capacity of the fine hall in which the show will be held will be tested to its utmost. Mr. Quentin informs furthermore that requests for premium lists have been received from ten different states, which insures such competition as is delighted in by the true fancier. A prize won at such a show will mean something to the fortunate ones. The personnel of the committee in charge, upon whom responsibility for entire satisfaction to exhibitors devolves, is sufficient guaranty that confidence may be justly reposed in it, being as Mr. Quentin points out, of the same material that said, when fire, floods, and tornadoes swept Paterson, "We are able to take care of our own."

Incubator Companies Consolidated.

A consolidation of the interests of incubator and poultry supply companies was effected October 1st, and is known as the United Incubator and Poultry Supply Manufacturing Company. The companies entering the consolidation are the Star Incubator and Brooder Co., Excelsior Wire and Poultry Supply Co., Pineland Incubator and Brooder Co., Empire Star Incubator Co., Great Eastern Incubator Co., Star Manufacturing Co., and the North Western Poultry Supply Company. We are informed that several other concerns are now under consideration.

The manufacturing places of the different companies will be closed except that of the Star, and all the manufacturing will be done at the latter's place in Lincoln, N. J., where they have a large tract of land adjacent to the railroads. The retail business and general offices will be at 26—28 Vesey street, New York city. The officers are L. S. Bache, president; C. E. Paxton, vice-president, and Wm. V. Russ, treasurer.

6 YEARS IN SUCCESSION
Our Barred Plymouth Rocks have won 1st Pen at the great Brooklyn Fair. Pocket Book Pointers, with mating list free.
Lambert's Poultry Farm, Apponaug, R. I.

First Premium WHITE WYANDOTTES.

1907 winnings No. Adams, 1st and 2d; Springfield, 1st on pen; Pittsfield, 1st on pen, winning silver cup. Old and young stock for breeding and exhibition at a bargain. Write for wants.

E. VAN DYCK, Adams, Mass.

MAKE 'EM HUSTLE

Active fowls are egg-layers and money-makers. Keep them interested and expectant. Feed them thro' our **AUTOMATIC POULTRY EXERCISER AND FEEDER** and save yourself worry and anxiety. Filled once a week it is always where they can get food, but only a little at a time, just as nature intended. Three sizes, \$1.00 up. Six days' free trial. Send for new booklet, telling how to feed fowls economically.
G. P. COATFS CO., Box E, Norwich, Conn. **\$1.00 UP**

Double the EGG Production
of your hens by feeding them green cut bone. But it must be cut bone, not split. The one bone cutter which mills the bone—actually cuts it into particles suitable for all sizes of fowls is the

STEARNS BONE CUTTER

Saves energy, time and money. Cuts hard or soft bones, meats, vegetables, etc.

30 Days FREE Trial

Write for proposition and catalogue.

E. C. STEARNS & CO., Box 6, Syracuse, N. Y.

MODEL
MFG. BY *Chas. Cyphers* TRADE MARK

MODEL
Incubators and Brooders

YOU WANT THE MODEL A hatcher that does not require night watching; A hatcher in which the heat is perfectly, automatically regulated. Contains the most perfect heat controller in existence. Strong, yet active; sensitive, yet positive—perfect in action.

The Patent-Office has decided in my favor in the interference suit on this perfect-acting regulator, **THE MODEL CORRUGATED LEAF, COMPOUND THERMOSTAT.**

This thermostat has three corrugations in each leaf; is exceedingly strong and rigid; is not easily damaged; and is so positive in action that the entire movement given off by the different coefficient of expansion between the two metals of which it is made is transmitted to the controlling device without any loss of movement.

The Model Incubator gives a perfect heat control, which stimulates and holds the germ development uniformly constant and normal, as under a hen. This wonderful hatcher has almost a perfect balance in ventilation and humidity, and supplies all the vitalizing principles found under the incubating hen. The Model Incubators and Brooders are used on the biggest money-making commercial poultry plants in this or any other country. The Model Double Indoor Brooder is just what you want for winter work. Broiler men pronounce it the most successful rearer yet produced. At the Model Farm, where we raised over 80,000 birds the past season, the Model Double Indoor Brooder did the best winter work. Buy your incubators and brooders of the man who knows how to hatch and raise poultry, who is doing it successfully on a commercial basis, and who can help you to be successful. Your success is my success. Write for my printed matter.

CHAS. A. CYPHERS, President, Model Incubator Co., 315 Henry St., Buffalo, N. Y.

To say, when writing advertisers, "SAW AD. IN FARM-POULTRY," will benefit you — please them — and help us.

A Valuable Number.

Numbers for 1905 are received at this office regarding squab raising, and request for more general information relative to proper housing and location are frequent. We have a limited supply of the May 15th, 1905, edition of FARM-POULTRY, containing an article by the well known squab raising expert, Mr. Wm. E. Rice, entitled, "Detailed Plans of Buildings for Squab Raising." Definite information is given about properly locating the buildings, while the material used and the manner of pen division, nest arrangement, etc., is clearly explained, so that anyone may understand. This number furthermore contains a general view of Mr. Rice's squab plant, floor plan of his buildings, end view of house and fly, sectional view through center of coop, showing partition and arrangement of nests and details of construction of his coops No. 1 and 2. This makes five cuts in all, and the last four named are of especial value, having been prepared with great care, and every feature of construction identified by explanatory words on each cut. Any reader now interested in the squab raising industry, or who may be contemplating engaging in it later on, will do well to obtain a copy of this number, which will be mailed on receipt of 5 cents as long as they last. Many readers we dare say, will be willing to expend this small amount on general principles, though not now interested, as it is undoubtedly a valuable piece of literature to possess.

Brockton Fair Poultry Show.

When fall fairs are being considered there is no excuse for comparing any of those of this section with Brockton. Brockton is Brockton; the rest are the remainder, nothing more. It is as true of the poultry exhibit as of the other departments of the fair.

While the entry was a hundred or two smaller this year than last, it is easily accounted for by the scarcity of early chicks this year. The management is not dismayed by a little thing like this, and they are going to add to and increase the inducements until they fill the large new exhibition building which has no rival in the east. Another season will probably witness the drawing together of more exhibitors by the offering of alluring gold cash specials.

It takes both numbers and quality to make a show, however, and in quality the show was not inferior to any of the previous exhibitions, and in several classes manifestly superior. The American varieties showed much improvement as a rule in quality, and while one or two varieties dropped considerably in numbers, the quality suffered in no degree.

The greatest drop was in the White Plymouth Rock classes, but the first cock and first pullet were of exceptional quality, and fit to win at the big winter meets.

There were more than twice as many Barred Plymouth Rocks as last year. There were over twenty cockerels, and over thirty pullets. The first cockerel and first and second pullets were easily above their contemporaries in point of merit, while the first cockerel was a bird of quality and size. The first cock was clean color and finely barred, and the first and second hens were very nice specimens. All were much better than the corresponding winners of last year.

Mr. Denny, who judged the Buff Orpingtons, Buff Wyandottes, and Buff Rocks, said he found good specimens in all these classes, and was much pleased with what he found on his initial trip as a judge to the Brockton fair.

Some of the Mediterranean classes are particularly well filled, and with good quality. The Leghorn varieties were well represented. Of course, the S. C. Browns and Whites were the largest, and in this instance easily the best. There were several well matured chicks of surprising quality.

The Bantams were a show of themselves, and a good display from any point of view. The water fowl were out in numbers, and when James Cutting, Esq., had finished his duties as judge he had nearly made a circuit of the building, as they were mostly cooped against the outside wall. It was the initiation of the said

James as a judge, and he was rather nervous, in fact, so much so that for a time he lost his voice; but as the exhibitors in his classes were charitable and no one found fault, he rapidly recovered his old time fluency of speech.

The pigeon show moved up a peg with a larger entry and more interest, if possible than last year. The display of Homers was the best attraction in this department.

As for several years past, the poultry department was under the management of Messrs. Rogers and Packard.

Facts of Interest to Farmers.

New ideas in the care and feeding of farm animals have brought to pass some radical changes in farm methods, greatly to the advantage of the farmer.

As an instance, take what may be called the "tonic idea." It teaches the necessary use of a proper digestive and corrective preparation during the weeks or months in which an animal is being fitted for market.

While this is a comparatively new idea, its importance cannot be over estimated. No one single feature of the "new farm science" touches the profit side of the business so directly as this.

It points the way to a vastly more prosperous era in cattle raising as a branch of farm operations. It means greatly increased profits and a business established on a permanent basis.

The "tonic idea" is a simple, common sense proposition that the feeder of live stock will instantly appreciate once it is brought to his attention. Every feeder knows that at some point in the fattening process there may come to the animal a more or less serious digestive breakdown caused by long continued heavy feeding. No need to say that this disaster is to be avoided if satisfactory results are to be reached or a margin of profit realized.

The purpose of the stock "food tonic," then, is to correct and prevent just this dangerous condition, and as the "ounce of prevention is worth the pound of cure," it follows that no feeder can afford to wait until the mischief is done, but should keep the digestive apparatus of his fattening cattle in a healthy condition from the start by the use of the tonic.

Experiments carried so far that there can be no reasonable doubt of the accurate results reached, prove that a "food tonic" containing the bitter principles which aid digestion, iron for the blood and nitrates which cleanse the system, is especially beneficial in preserving perfect animal health under all conditions.

No farmer or feeder can afford to risk his stock without it.

By acting directly upon the digestive

organs, it enables a fattening steer to consume, day after day, large amounts of grain, and of course lay on flesh rapidly.

To the cow in milk the result is the same, except that the increased assimilation of food is secreted as milk rather than fat.

To horses the "food tonic" is very valuable. General good condition is always present where it is given, and in fitting for market it gives most successful results.

Sheep and hogs derive an equal benefit from the "food tonic."

Lambs grow more rapidly where a very little is given in daily doses, and tip the scale at a better figure when market day comes.

Hogs receiving it are uniformly healthy, and make enormous growth in less time than would be possible under any other system of feeding. These facts show how vitally the farmers' interest is associated with the "food tonic" idea.

Such men as Professor Winslow, Quitman, and Finley Dun indorse its ingredients, and successful men are using it.

If you doubt the efficiency of advertising in business development, just see how Dunn and Bradstreet rate most of the firms who have depended upon it.—Advertising Chat.

You Ought to Get More Eggs

And You Can Save Feed Bills

EVERY atom that hens use in making eggs, comes from the food they eat. They can't get it anywhere else. That being true, you must, if you expect eggs in abundance, feed foods rich in egg-making materials.

Analysis shows that not only eggs, but the bones, the lean meat, and the feathers of fowls are all made up of what the professors call "protein."

Hence, fowls must have protein if they are to give you the best results.

But protein is found only in small quantities in most grains and vegetables, but in large quantities in animal food.

That's why all fowls crave worms and bugs. Instinct teaches them that they need such food.

Of course, they can't catch "the early worm" in winter nor when they are yarded, so you must give them this protein in some other form.

The best substitute is fresh-cut, raw, green bones—the trimmings from the meat market, with meat and gristle adhering to them.

In its raw state it contains exactly the same food elements as the worms and bugs. It contains over four times as much protein as grain, and is rich in lime and other egg making materials. That's why fowls like it so well and why it doubles the egg-yield, increases fertility, makes larger hatches and stronger chicks, develops earlier broilers and layers, and makes

heavier market fowls—Because it "balances the ration" by supplying what is most scarce in grains. You can't get the best results without it.

But don't confuse fresh-cut, raw bone with so-called "beef scraps," from which most of the nutrition has been removed by the process of preserving.

It's the raw, live worm that the hen likes—not the dried up one.

It is fresh, raw bone that does the work—not dried "beef scraps" nor "bone meal."

Green bone is obtained for almost nothing from your butcher, and easily and quickly prepared, with Mann's Latest Model Bone Cutter. We want you to try this machine. You don't have to buy it unless it suits—just try it first.

To prove to you exactly what it will do, we will send you any Mann's Bone Cutter which you care to select from our catalog on

10 Days Free Trial (No Money in Advance)

It cuts all bone with adhering meat and gristle, never clogging, and wasting nothing.

It automatically adapts itself to your strength so that any one can use it.

It is strong, durable and does not get out of order. But try it and see.

SEND TODAY FOR CATALOG—select the machine you want to try—we'll do the rest. Can we make a fairer offer?

MANN'S LATEST MODEL
Bone Cutter
10 Days Free Trial

F. W. MANN CO., Box 55, Milford, Mass.

TRY THIS
10 Days Free
No Deposit
No Money in Advance



Make no mistake; you can find no other poultry food that will give as great results at so low a cost, and you can find no other machine that does as good work, so easily. Let us send you one without cost to you, that you may prove our claims.

To say, when writing advertisers, "SAW AD. IN FARM-POULTRY," will benefit you—please them—and help us.



MARKET REVIEW.

BOSTON.

Boston Produce Market Report.

Eggs.

Receipts today, 4,054 cases; same time last year, 4,167 cases; receipts six days, 21,197 cases; same time last year 21,876 cases.

Receipts continue quite liberal, but include more or less storage stock, and very few strictly fancy new laid. Fresh gathered western are generally dull and take a very wide range as to quality and condition. Some very fancy, with a large proportion of new laid, exceed quotations, and such lots are wanted. There are comparatively few good enough to exceed 23¢@24¢, however, and a good many have to be worked off at 20¢@22¢, and under. Fancy henery and extra eastern are still bringing full prices. Refrigerators offering freely and moving slowly in the range quoted.

Quotations at Mark.

Fancy henery.....	35..@
Me., Vt., N. H., extras.....	30..@32
Me., Vt., N. H., common to good.....	20..@24
York state.....	26..@30
Northwestern and western candled and selected.....	23..@24
Ind., Ills. and N. Ohio, selected.....	22..@23
Other choice western.....	21..@22
Western common to good.....	15..@18
Western dirties.....	13..@16

Refrigerators—

Early packed, fancy.....	20..@21
Summer packed, choice.....	18..@19
Summer packed, common to good.....	16..@18

Dressed Poultry.

Receipts today, 442 packages; same time last year, 785 packages; receipts six days, 2,711 packages; same time last year, 4,056 packages.

Best western fowls are selling slowly, and very few at anything over 14¢, with ordinary marks down to 12¢@13¢. Best large roasting chickens rarely exceed 15¢. Mixed sizes have to be forced off at low and irregular prices from 12¢@13¢. Fancy broilers still in limited supply.

Northern and eastern fowls and chickens in quite liberal supply, and unless strictly fancy, have to sell at easy prices. Ducks in moderate supply and steady at 15¢.

Fresh Killed Northern and Eastern—

Fowls, choice.....	15..@16
Fowls, common to good.....	13..@14
Chickens, 4½ to 5 lbs. each, ½ lb.....	20..@20
Chickens, mixed sizes, ½ lb.....	12..@16
Green ducks, ½ lb.....	15..@

Nearby Broilers—

Choice 3½ to 4½ lbs. to pair, ½ lb.....	15..@20
Pigeons, choice, ½ doz.....	\$1 25 @ \$1 50
Pigeons, common to good.....	75 @ 1 00
Squabs, ½ doz.....	2 00 @ 2 25

Ice-packed

Turkeys.....	15..@16
Fowls, selected.....	14..@
Fowls, common to good.....	12..@13
Chickens, choice large roasting.....	15..@
Chickens, mixed sizes.....	12..@13
Broilers, fancy ½ lb.....	16..@17
Broilers, fair to good ½ lb.....	13..@15
Old cocks.....	10..@

Live Poultry.

The market is dull with 11¢, about top for best lots of fowls or chickens. Some poor lots have to clean up at 10¢, and under.

Fowls, ½ lb.....	10..@11
Spring chickens, ½ lb.....	10..@11
Roosters, ½ lb.....	8..@
Pekin ducks, young, ½ lb.....	14..@

NEW YORK.

From the Producers' Price Current.

Eggs.

Receipts today, 4,735 cases; receipts for week, 50,589; receipts last week, 53,284 cases; receipts same week last year, 61,158 cases; receipts since March 1st, 3,627,080 cases; receipts same time last year, 3,211,236.

Receipts have run about the same as last week, but there were liberal accumulations of ordinary grades of fresh, and large offerings of refrigerators, many holders of which pressed their stock for sale even at the expense of some further reduction in values. The demand has been of a selective character, running as largely as possible on fine qualities; where interest has been shown in other grades buyers have been met promptly; indeed no reasonable bids have been turned down, receivers being so anxious to move the goods. By these strenuous methods considerable stock has been moved, and some holders have succeeded in working down their accumulation somewhat. Some relief might be expected from the lighter invoices of fresh eggs now on the way were it not for the excessive quantity of storage eggs that is being pressed to sale.

Fresh gathered, extras, ½ doz.....	27..@28
Nearby, firsts to extra firsts.....	23..@26
Western, fresh gathered, extra firsts.....	24..@26
Western, fresh gathered, firsts.....	21..@23
Western, fresh gathered, seconds.....	19..@21
Fresh gathered, thirds.....	17..@18
Fresh gathered, dirties, country candled.....	16..@17
Fresh gathered, dirties, uncandled.....	14..@16
Checked eggs, country candled.....	14..@15
Checked eggs, uncandled.....	12..@14
Refrigerator, early packed, prime to fancy.....	20..@21
Refrigerator, early packed, fair to good.....	18..@19
Refrigerator, summer packed, finest.....	17..@19
Refrigerator, summer packed, fair to good.....	17..@18
Refrigerator, lower grades.....	15..@16

Dressed Poultry.

Receipts today, 1,594 packages; receipts for week, 12,115 packages; receipts last week, 12,097 packages; receipts same week last year, 12,263 packages; receipts since January 1, 569,825 packages; receipts same time last year, 546,900 packages.

The market for fresh dressed fowls and chickens is winding up the week in a completely demoralized condition, more especially for medium grades of chickens. The market has been shaping toward lower prices on chickens most all the week, but no decided break occurred until near the close. Fresh beef is said to be more plenty than for months, and considerable cheaper; mutton and lambs are 1 to 1½ lower than last week, and as butchers can make a larger profit on meats than poultry they have been pushing the latter to the neglect of poultry. Another unfavorable feature at the moment is the demoralized condition of the live poultry market, which has turned many shippers to dressing, and this causes an unusually large increase in shipments of dressed poultry to arrive here next week. The greatest trouble however has been the generally unattractive quality of the offerings of most all the western poultry.

FRESH KILLED—ICED.

Turkeys—

Western, old hens, average best.....	..@18
Western, old toms, average best.....	..@18
Old, fair to good.....	14..@16
Old, inferior.....	12..@13
Spring, 4 to 6 lbs. each, meaty, ½ lb.....	22..@25
Spring, fair to good, ½ lb.....	15..@20

Spring Chickens broilers—

Philadelphia, 3 to 4 lbs. to pair, per lb.....	22..@24
Pennsylvania, 3 to 4 lbs. to pair, per lb.....	18..@20
Pennsylvania, poorer grades.....	13..@15
Western, dry picked, fancy.....	16..@18
Western, dry picked, poorer grades.....	12..@13
Other western, scalded, fancy.....	14..@15
Western, scalded, poorer grades.....	12..@13

Spring Chickens, roasting—

Philadelphia, fancy.....	22..@24
Pennsylvania, fancy.....	16..@18
Pennsylvania, poorer grades.....	12..@13
Western, dry picked, 8 lbs. and over to pair.....	14..@15
Western, dry picked, medium weights.....	11..@12
Ohio and Michigan, scalded, fancy, large.....	14..@15
Ohio and Mich., scalded, mixed weights.....	12..@12
Other western scalded, mixed weights, best.....	12..@12
Other western scalded, average run.....	11..@11
Other western, poorer grades.....	9..@10

Fowls—

Western, dry picked, selected, heavy, ends out.....	..@14
Western, dry picked, average best, straight.....	13..@13
Western, dry picked, poor to medium.....	12..@12
Western, scalded, choice.....	13..@13
Western, scalded, poor to medium.....	12..@12
Southwestern, average best.....	13..@13
Southwestern, poor to medium.....	12..@12

Other Poultry—

Old cocks, dry picked.....	9..@10
Old cocks, scalded.....	9..@10
Ducks, spring, L. I. and eastern.....	..@17
Ducks, spring, Pennsylvania.....	16..@16
Ducks, spring, Virginia.....	15..@16
Ducks, spring, western.....	10..@13
Geese, eastern, spring white.....	20..@21
Geese, eastern, spring dark.....	17..@18
Squabs, prime white, 10 lbs. to doz. ½ doz.....	@ \$4 00
Squabs, prime white, 9 lbs. to doz. per doz.....	@ 3 50
Squabs, prime white, 8 lbs. to doz. ½ doz.....	@ 3 00
Squabs, prime white, 7 lbs. to doz. ½ doz.....	@ 2 50
Squabs, prime white, 6 lbs. to doz. ½ doz.....	@ 2 00
Squabs, mixed, per doz.....	1 75 @ 2 00
Squabs, dark, per dozen.....	@ 1 25
Squabs, ends, per dozen.....	@ 50

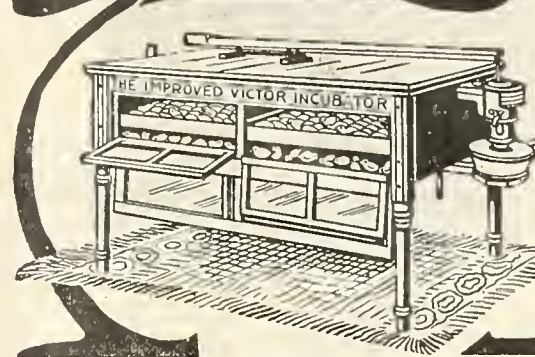
Live Poultry.

Receipts that were unloaded this week foot up 51 cars of western and 1 car of southwestern by freight, and 4 or 5 cars of scattering lots by express. None of the fresh receipts of carload lots by freight that have arrived since Tuesday has been unloaded, and there is an accumulation of 26 carloads held by receivers on tracks at the close. The market has continued in a badly demoralized condition. The unsettled condition prevented receivers and jobbers agreeing on prices early in the week, and official quotations were not settled until Wednesday, when the figures as quoted below were established.

N. Y. Live Poultry Commission Merchants Protective Association Official Quotations:

Spring chickens, per lb.....	..@12
Fowls, per lb.....	..@13
Roosters, young and old, per lb.....	..@ 9
Turkeys, per lb.....	..@14
Ducklings, L. I., full grown, per lb.....	..@14
Ducks, western, per lb.....	..@12
Ducks, southern and southwestern.....	..@11
Geese, western, per lb.....	..@12
Geese, southern and southwestern, poor.....	..@11
Guinea fowls, per pair.....	..@50
Pigeons, per pair.....	..@20

Start Early



the greatest profits are from the first and best spring chickens on the market. Do not be satisfied with old, easy going methods. Get the best equipment—produce the best—and make the most money.

Write for our new book "Incubator Whys" telling why our machines turn 90 per cent of the eggs into chickens and why our prices are lowest. We will send you names and addresses of people in your vicinity using Victor Incubators and Brooders so that you can get first-hand information about us and our machines.

Please tell us whether you are interested in beginners' outfits or larger machines.

GEO. ERTEL CO., Quincy, Ill.
Established 1867.

WINSLOW'S PLYMOUTH ROCKS—Barred and White.

Do you wish a nice White cock or hen to show? If so I can please you. If it is a pen for breeding, I have the birds at the right price. 200 cocks, hens, cockerels, and pullets from \$2 each up. Business birds for practical people.

A. P. WINSLOW, Box 1542, Freeport, Me.

BROCKTON FAIR, OCT. 1--4, 1907

We won on S. C. R. I. REDS, 4th and 5th cock; 2d cockerel; and 4th pen. On AMERICAN PEKIN DUCKS, 1st drake and color special; 3d drake; 5th duck; 1st, 2d, and 3d pen. On ROUEN DUCKS, 1st, 2d, and 3d drake; 2d, 3d, and 4th duck; 1st, 2d, and 3d pen. On INDIAN RUNNER DUCKS, 1st, 3d, and 4th drake; 2d, 3d, and 4th duck; 1st, 2d, and 3d pen. Young stock of each variety for sale. Also a few extra JAPANESE PEKIN drakes; 2,000 to select from. Write us your wants. Catalogue free.

HITE BIRCH POULTRY FARM,

Box B,

BRIDGEWATER, MASS.



ORPINGTONS Black, Jubilee, White, and Buff.

At Brockton Fair, the Madison Square Garden of the fall shows, I won on the above varieties, 5 firsts, 4 seconds, 5 thirds, 2 fourths, and 1 fifth, besides specials, winning more points than any other two Orpington exhibitors, ten competing. I have a nice lot of cockerels upon which I am now making some very attractive quotations, and can furnish any grade from a bird fit to show in fast company to a strictly utility bird well bred but lacking in fancy points. No more pullets for sale at any price. Write for circular and quotations.

ANGIER L. GOODWIN, Box 247, Melrose Highlands, Mass.

SIBLEY'S ROSE COMB RHODE ISLAND REDS

Bred for laying quality, size, shape, and color. Won first and sweepstakes prizes at Detroit and Chicago, in 1906 and 1907, in the largest classes ever shown in the middle west. Will have a few yearlings and some young stock for sale.

FRANK CHURCHILL SIBLEY,

1032 E. Jefferson St.,

SOUTH BEND, IND.

Good for One Free Book, "POULTRY PROFITS"

SURE HATCH INCUBATOR CO., Box 41, Fremont, Neb., or Dept. 41, Indianapolis, Ind.

Please send Poultry Profits Book that tells all about Raising Poultry for Market and Making More Egg Money—all about the famous Sure Hatch Incubator and how it is sold on unlimited trial, freight paid, under 5 years' guarantee. I am sincerely interested and not writing merely out of curiosity. I want you to tell me how to make the most money out of chickens, ducks and turkeys.

Sign and Mail Today

My name is

Address



Barred and White Rocks

Winners at the largest shows. A few good cockerels for sale to make room. Bargains if taken at once. Exhibition birds a matter of correspondence.

L. C. BONFOEY, Box E, Vernon, Conn.

WE WANT AGENTS.

Here is an excellent opportunity to make money for anyone who will devote a little spare time to securing subscriptions to that great poultry publication, **Farm-Poultry**. Our proposition is a liberal one—extremely so. It enables you to realize a splendid profit on every order taken. **Farm-Poultry** is issued twice a month—1st and 15th, and the price is but 50 cents per year. Every number interestingly illustrated. It is conducting a series of "FIRST LESSONS IN POULTRY KEEPING" which is the favorable talk of the poultry world. You will be surprised how promptly and willingly your poultry-keeping friends will subscribe. Write us for full particulars.

FARM-POULTRY PUBLISHING CO., 232 Summer St., Boston, Mass.

Woodlands Farm's Third Annual Sale.

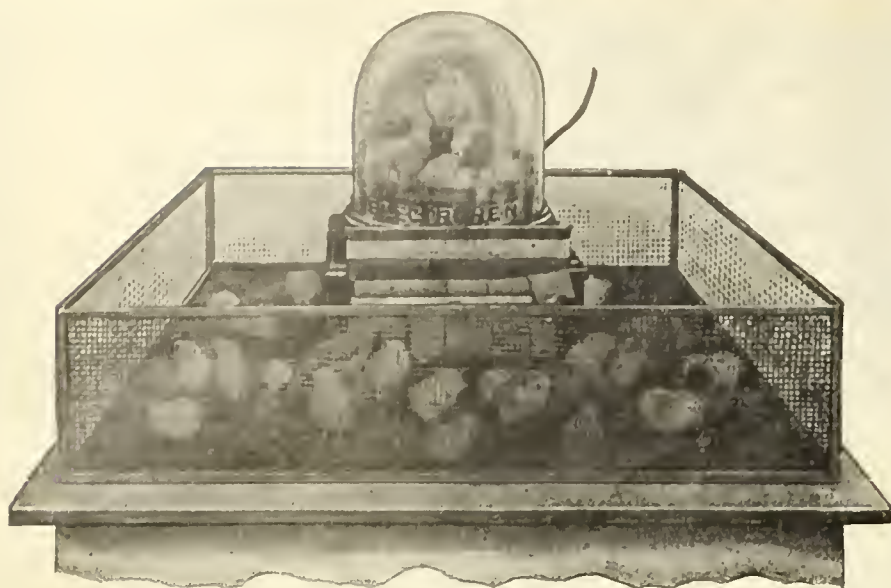
Six thousand heavy laying White Leghorns, Barred Plymouth Rocks, and White Wyandottes, at prices within the reach of all. You cannot afford to miss this opportunity to stock up with birds of our heavy laying strains. Stop and think. We have

835 TRAP NESTS IN ACTUAL USE.

Doesn't that tell you we are breeding to increase the laying qualities of our birds? Eggs \$2 and \$2.50 per 15; \$8 and \$1 per 100; \$60 and \$80 per 1000. Send today for our free booklet telling all about our methods, and giving description of plant.

LEE T. HALLOCK Prop., Box A, Iona, N. J.

To say, when writing advertisers, "SAW AD. IN FARM-POULTRY," will benefit you—please them—and help us.



The "Electrohen."

Photographed at Niagara Falls, August 15th, 1907. A glass globe incubator and brooder combined (operated solely by electricity) in which the pipping of the eggs and the exclusion, drying, and brooding of the chicks or ducklings are in plain view at all times.

Hatching Chickens By Electricity.

New and Interesting Development In the Science and Practice of Incubating and Brooding Chicks and Ducklings by Artificial Means.

Electrically Operated Incubators and Brooders, as Exhibited by Cyphers Incubator Company, of Buffalo, N. Y., at the Thirty-Second Annual Convention of the American Poultry Association, Niagara Falls, N. Y., August 13-15, 1907.

By GRANT M. CURTIS, President Cyphers Incubator Company.

DURING the recent annual convention of the American Poultry Association, at Niagara Falls, a most interesting display of electric incubators, electric brooders, and electric thermostats was made by Cyphers Incubator Company, showing chicks being hatched and brooded literally by the hundreds by means of ordinary electric current produced by the falls of Niagara. This exhibit attracted unusual attention. Old and experienced poultrymen made repeated visits to the large room in which the exhibit was held.

In these new and novel electric incubating, brooding, and regulating devices,

so constructed that it can readily be placed in the hatching chamber of any of the oil incubators now in use throughout the civilized world, its purpose being to supply electric heat in place of the oil heat commonly used, without interfering in any way with the use of the incubator as a lamp machine, if that is desirable.

The "Electrobator" is a six dozen egg capacity electric incubator, designed especially for the use of poultry fanciers and other poultry raisers who reside in cities or villages where ordinary lighting current is obtainable, and who do not require large hatching capacity. It is constructed of quarter sawed oak, mission finish, and is as attractive in appearance as a music box. Inasmuch as no odor, gases, or dirt of any kind attaches to its use, the "Electrobator" can be used, and will do satisfactory work in living apartments and offices where the owner of a lamp machine would not

find it desirable to run an incubator heated by kerosene oil. The machine shown in the illustration herewith was in successful operation at Niagara Falls, and hatched the chicks shown in the picture. The photograph from which this half-tone was made was taken at Niagara Falls during the A. P. A. convention, by a local photographer.

The Electric Adaptable Brooder shown in the accompanying illustration (photographed at Niagara Falls, Aug. 15th, 1907), was designed to take care of chicks after they are hatched. The temperature is maintained automatically at ninety degrees to ninety-five degrees for the first week, and after the chicks are older the regulator is adjusted to from eighty degrees to eighty-five degrees, until finally the artificial heat is dispensed with entirely. In this device, as in all others here referred to, an electric thermostat cuts out the current whenever the temperature goes above the required degree, and turns on the electricity, automatically and infallibly, when the temperature in the hatching or brooding chamber goes below the required degree. When the current is cut off there is no cost for operation—none whatever. As regards the cost generally of operating the electric incubating and brooding apparatus herein described, an ordinary 16-candle



The "Electroplane."

An electric heater for use in the top of the egg chamber of any make of incubator on the market in which it is desired to employ electricity in place of kerosene oil or gas.

the necessary heat was obtained from ordinary incandescent lamp electric lighting fixtures. In other words, the apparatus here referred to can be used with safety and convenience wherever ordinary electric lighting current is available twenty-four hours of every day, Sundays included, during the hatching and brooding season.

One of the illustrations presented herewith shows the "Electroplane," a device



The "Electrobator."

Photographed at Niagara Falls, August 15th, 1907. An electrically heated and regulated incubator designed expressly for fanciers and poultrymen who require only small hatching capacity. Holds seventy-two eggs.

PROVIDENCE SHOW.

Twenty Second Annual Exhibition

R. I. Poultry Association.

DECEMBER 3, 4, 5, 6, 7, 1907.

Infantry Hall, - Providence, R. I.

Entries close November 16, 1907. Address for Premium Lists,

W. I. BROWN, Secretary,

6 Exchange Place,

Providence, R. I.

Blanchard's White Leghorns.

Are no experiment, having been carefully selected and bred for over twenty years, with results that justify the claim that this is one of the greatest laying strains of Single Comb White Leghorns in existence. No labor or expense has been spared in building up and perfecting this strain, and while the production of large pure white fancy market eggs has been the main object, Standard qualities have not been neglected. They are large, vigorous, active, and handsome. Good winter layers, and keep at it all summer. Unexcelled for introducing new blood, or as foundation stock. Illustrated circular free.

WINNERS AT MADISON SQUARE GARDEN, NEW YORK, 1903, 1904, 1905 and 1906.

STOCK FOR SALE, BOTH OLD AND YOUNG.

This ad. appears monthly.

H. J. BLANCHARD, Box 46, Groton, N. Y.

WYCKOFF'S S. C. WHITE LEGHORNS,

Acknowledged everywhere the World's Greatest Laying Strain; Unequaled in Standard Qualities. Remember that we are the originators and for more than 30 years specialty breeders of the justly celebrated "Wyckoff" strain of S. C. White Leghorns. The Most Profitable Strain of Poultry in America today. Place your orders at headquarters, and make no mistake. Choice stock for sale in any quantity in yearling hens and fine strong early cockerels. Also a few yearling cock birds yet to spare. Send for catalogue, and let us know your wants.

WYCKOFF'S FARM, Aurora, Cayuga Co., N. Y.

IF You Want More Eggs

If you want to get eggs more fertile,
If you want to get bigger hatches,
If you want to get stronger chicks,
If you want to get heavier fowls,
If you want to cut down your feed bills,
If you want to double your poultry profits.

Send For This Booklet

"Worms and Bugs"

Common sense on the feeding question. A great help to poultry success. One man writes us: "If every poultry raiser in the U. S. would read it and follow it, it would double the country's poultry profits in a single year!" We'll send it Free while present edition lasts. Write today.

F. W. MANN CO.,

Box 555,

Milford, Mass.



FREE

Monmouth Poultry Farms,

Freneau, Monmouth County, New Jersey.

Breeders of the Monmouth Strain of S. C. White and Buff Leghorns, White and Buff Plymouth Rocks. We offer our breeders of 1907 for sale at prices which will reach all. 5000 young stock to select from, and a grand lot they are. They win for us, they will win for you. Winners at New York and the leading shows.

Send for our catalogue.

J. COURTNEY PUNDERFORD, Proprietor.

ROBERT T. DODDS, Manager.

TUTTLE'S ROSE COMB RHODE ISLAND REDS

At Madison Square Garden, 1906.

Cocks, 1st and 3d
Hens, 1st and 4th
Cockerels, 2d, 3d and 4th
Pullets, 1st, 2d, 3d and 4th
Pen, 1st.

At Boston, 1907.

Cock, 1st
Hens, 1st, 2d and 3d
Cockerels, 1st and 2d
Pullets, 1st, 3d, 4th and 5th
Pen fowls 1st; pen chick 1st.
Also special for best R. I. Red male in the show.

YEARLING HENS, \$2 to \$5; YOUNG STOCK, \$2 AND UP.

ROBERT C. TUTTLE,

197 Blue Hills Ave.,

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THIS IS THE QUAKER CITY FAMILY OF GRINDING MILLS
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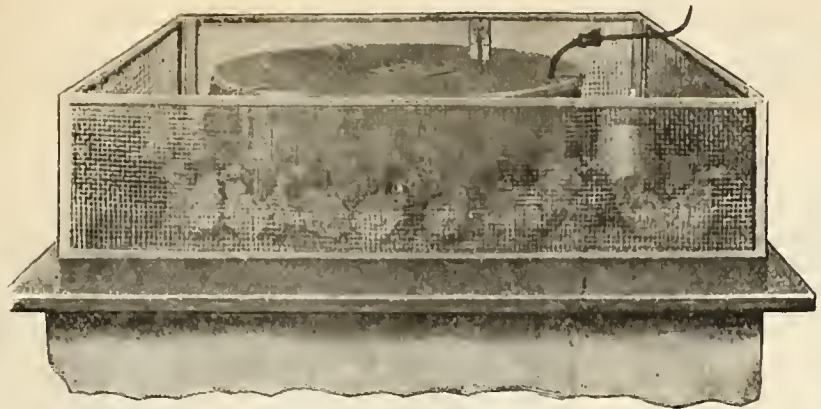
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Grind Corn and Cobs, Feed and Table Meal.

10 lbs. to 70 bushels per hour; ball bearing; easy running. Shipped from Philadelphia or Chicago. Send for free catalogue to

THE A. W. STRAUB CO., 3737-39-41 Filbert Street, Philadelphia, Pa.

To say, when writing advertisers, "SAW AD. IN FARM-POULTRY," will benefit you — please them — and help us.



Adaptable Electric Brooder.

Photographed at Niagara Falls, August 15th, 1907. Operated and regulated by ordinary electric lighting current. Can be adapted to use almost anywhere.

power incandescence electric light will supply sufficient heat to run a No. 1 Standard Cyphers Incubator, capacity about 144 eggs, in a room in which the temperature is forty-five degrees and the current will be "on," i. e., passing into the machine, only about one-half the time. This fact has been demonstrated by repeated tests.

The "Electrohen" (see illustration) is the trade name for a unique and artistic oval glass electric hatching device to be used for advertising and educational purposes—for advertising purposes at poultry shows, in store windows, etc.; for educational purposes in college and high school laboratories, in class rooms for nature study, etc.

The Electrohen, like the other electrical apparatus here described, is entirely free from odors, escaping gas, or other offensive elements, hence can be introduced into the handsomely furnished and electrically equipped homes or offices of fastidious persons, including professional or business men, also into school rooms or laboratories without inconvenience or danger.

The advantages of using electricity for incubating and brooding purposes are numerous and important, and the inventors of the machines herein briefly described believe that electricity will be adopted generally within the next few years in all cities and villages of the United States and many foreign countries where ordinary lighting current is obtainable twenty-four hours of every day, Sundays included, throughout the hatching season. Permit us to add, further, that the number of such cities and villages is now surprisingly large, and they are increasing rapidly. How about your home town, reader?

Many friends of Cyphers Incubator Company have congratulated it as the pioneers in developing and introducing this method of hatching and rearing domestic poultry by artificial means.

The complete catalogue of Cyphers Incubator Company for 1908, (ready for mailing about December 1st), will contain a full description of the electrical devices above mentioned.

Springfield Fanciers' Club.

Springfield, Mass., will be the best show town in New England outside of Boston, and a winning at Springfield will be well worth advertising. Never in the history of poultry organizations in this city has enthusiasm and determination to hold a poultry show been as pronounced as this year.

The officers of the Springfield Fanciers' Club having had much experience in handling successful poultry shows, started in early to make arrangements for their show. The premium list will be ready for mailing by the time this is read, and all interested in the Springfield show should send for a copy. A careful perusal of the same will convince any fair minded reader that we mean business, and that the inducements we offer in the shape of prizes cannot fail to bring out a large entry.

Our hall is in the very best location in the city, and the light in the same is such that judges will have no excuse for calling a brassy bird white, or a smutty or metallic barring the proper color for Barred Rocks. This can be accomplished only with plain glass windows, with which this hall is well supplied. Our judges are a guaranty that the work will be well done, and no favoritism shown.

As this will be a comparison show, we expect all judging to be done the first

day, and ribbons up, which gives the exhibitor ample time to receive the benefit of his winnings.

The White Wyandottes are especially favored in having the \$100 offered by the National White Wyandotte Club, to be competed for at our show. There will be a state meeting of this club during the show. Other valuable prizes will be offered on this breed. The Barred Rocks will be one of the banner classes, as the \$25 state cup of the American Plymouth Rock Club will be competed for by club member on best cock, hen, cockerel, and pullet.

The state meeting will be held at our show. Two more valuable cups and large cash prizes will be ready for the winners on this breed. White and Buff Rocks, Single and Rose Comb Rhode Island Reds, Buff and Columbian Wyandottes, White and Brown Leghorns, and Buff Orpingtons are especially well favored with cups and cash specials.

Remember our dates are December 3d to 6th, and entries will close November 25th. Our secretary is well known in the United States and Canada as a breeder, exhibitor, and judge at the largest shows in the country, and you may be sure that fair treatment will be offered you with your exhibits. Send for premium list to W. R. GRAVES, Sec'y.

Springfield, Mass.

The American Leghorn Club.

The annual meeting of the American Leghorn Club will be held in Madison Square Garden, New York city, Thursday, Dec. 19, 1907, during the New York show; \$160 in cash will be offered at this show to exhibitors who are members of the American Leghorn Club. This amount will be equally divided on each variety.

Send \$2 to the secretary, and become a member and win some of the cash prizes.

W. F. BRACE, Pres.

W. W. BABCOCK, Sec'y-treas.

Bath, N. Y.

Boston Show.

The Boston Poultry Association has established an office at 30 Broad street, Boston, Mass., where all show matters will be given prompt attention. All communications should be addressed to the association in order to receive immediate attention. S. H. ROBERTS, Sec'y.

NEW JERSEY'S LEADING SHOW

The Paterson, N. J., Poultry, Pigeon and Pet Stock Association

Incorporated.

Third Annual Exhibition

HELD AT

ENTRE NOUS HALL, - OLIVER STREET,

DECEMBER 4, 5, 6, and 7, 1907.

JUDGES:—Drevenstedt, Huyler, Cook, Seaman, and Stanton. Premiums First Prize \$5.00; Second Prize, \$3.00; Third Prize, \$2.00; 16 Silver Cups, Gold Specials and Ribbons. Entries close Nov. 19th, 1907. Send for Premium List to

O. H. QUENTIN, Secretary,

Clifton, N. J.

Chloro-Naphtholeum Dip For Poultry

Puts Poultry Diseases to Rout

Lice, Mites and the germs causing Roup, Chicken Pox, Cholera, Leukaemia, etc., are quickly and easily eradicated by Chloro-Naphtholeum. Its regular use, at trifling cost, will save you many a dollar.

The insect enemies of chickens breed with amazing rapidity. Don't let them get the start of you! Keep yards, poultry houses and feeding pens thoroughly disinfected at all times.

You cannot afford to experiment. Chloro-Naphtholeum Dip is the oldest Coal Tar Creosote Disinfectant on the market. Endorsed by highest authorities. Non-poisonous. One gallon (Price \$1.50) makes 100 gallons when ready to use. Sold by dealers everywhere.

E. Taussig, Pres., West Disinfecting Co., 29 E. 59th Street, New York. We have just published a valuable practical book giving results of our years of tests. Cost us hundreds of dollars—worth hundreds to you. Fill out coupon below and get one.

Book Coupon

West Disinfecting Co., 29 E. 59th Street, New York:

I enclose five 2-cent stamps, for which please send Book "Making Poultry Healthy and Keeping Them So."

Name _____

Address _____

R. & S. C. "REDS" FOR SALE.

(CIRCULAR)

AT BOSTON, 1907.

(TELEPHONE)

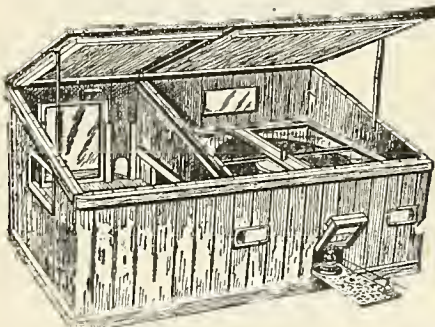
We won 2d pullet, 2d pen, and Special in R. C. class, and for our customers at N. Y., Boston, Hartford, Lenox and other shows.

Breeders \$1.50 and \$2 each. Young stock, after Sept. 1st, \$2 to \$10. Our birds are large, uniform in shape and color and a splendid laying strain. Eggs for Fall and Winter hatching a Specialty. A big lot of choice breeding and exhibition cockerels.

RED FEATHER FARM,

F. W. C. ALMY, Prop.

TIVERTON 4 CORs., R. I.



(Factory at Natick, Mass.)

Visible Brooder

Chickens seen at any time without lifting hover. No loss of heat; no exposure to cold. Perfect ventilation. Simple and economical. Send for interesting descriptive catalogue F.

THE VISIBLE BROODER CO.,
Office 24 Mt. Vernon St., Boston.

WE WANT NAMES

you TWO BEAUTIFUL PICTURES FREE. These pictures are reproductions of the most celebrated paintings in the world, and they are of high quality, and we know that you will be pleased and delighted with them; no pictures will be given for a list of less than ten names.

We want to send a free sample copy of a special issue of THE HOME MONTHLY (The National Poultry Journal) to a lot of poultry raisers who are not now taking our paper, and for that reason we want these names.

Send us immediately a list of at least ten poultry raisers and we will mail you, postpaid ABSOLUTELY FREE TWO REPRODUCTIONS OF THE WORLD'S FAMOUS PICTURES. Address

THE HOME MONTHLY, 637 W. 43d St., New York, N. Y.

ARE YOU GUILTY?

POTTER POULTRY HOUSE FIXTURES

Solve question No. 1 and provide the most complete, convenient, and sanitary equipment for the hen-house: save time and labor, and cost but a little. Over 20,000 in use. Our large 64 page catalogue 50 illustrations, shows 3 styles; 12 different sizes; also V. E. roosts, W. P. attachment and trap nests. Write at once for our large catalogue.

If you do not know about our fixtures and the Potter System, you are losing money every day you wait, for we can show you how to keep chickens more profitably and successfully if you will send for our large catalogue and free circulars. See our large half-page ad. in October papers.

T. F. POTTER & COMPANY,

Box D,

Downers Grove, Ill.

THE POTTER SYSTEM

Of selecting laying and non-laying hens answers No. 2. It is the greatest discovery of the century in the poultry world, and if you do not know the secret you are losing dollars every day you delay in writing us. Over 15,000 now use and recommend it. So will you when you learn it. You can pick the layers from the loafers and keep only the layers, keep fewer hens, get more eggs at a less cost. You cannot afford to be without our system. Write today for free circular.

THE POTTER PERFECTION FEED HOPPER

And our method of scientific and systematic feeding solves No. 3. Hopper is made in 3 sizes, with movable partitions for one or five food compartments. The most sensible, satisfactory and serviceable hopper ever made. Hens are healthier, and it saves feed. Our method of feeding tells you how to feed from chicks to laying hens, and how to take the cheapest and best egg making food known, costing 12 cents a bushel.

1. Of keeping your fowls in quarters which are unsanitary, inconvenient and infested with lice and mites?
2. Of keeping non-layers, loafers and non-payers when you can just as well have all layers in your flock?
3. Of starving some of your fowls, over-feeding others so that they are unhealthy and lay few if any eggs?

Fanciers' Information Bureau.

Conducted by A. C. SMITH, Assistant Editor.

In this department, Mr. Smith will answer questions relating to the description, breeding and exhibition of thoroughbred fowls. Readers whose questions are urgent will receive replies promptly by mail if they enclose 2c. stamp.

Selecting Chicks for Sex. (H. G. N.)—"In a lot of incubator chickens that I bought from two different parties, I got two pullets, the rest all roosters. The chickens were about three days old when I bought them. Is there any way of telling the difference between roosters and pullets at that age? I feel that I have been taken in."

"2. Can you give me a remedy for chicken cholera or diarrhea in hens and chickens? I had two hens sick with diarrhea; the movements of the bowels were yellow and green. I gave them castor oil, and they got well, but I do not like the castor oil for chickens. I would like to know of a remedy that I can have put up here. How much shall I give a hen and chicken?"

"3. Some people feed their hens nothing but mixed grain the whole year, and seem to be against mash at any time. They give beef scraps, oyster shells, and grit; in winter they warm the grain three times a day, and I know for a certainty that they get eggs in winter. On the other hand, I know parties that give a mash in the morning of bran and corn meal, and mixed grain two meals a day, and they don't get any eggs in winter, or but a very few. I would like to know the reason of giving a mash in the morning or any time. It is not so much trouble to give the mixed grain."

1. There is no way to tell the sex of chicks of that age. The persons who sold them knew no more about the sex of those chicks than you did.

2. The best remedy for both cholera and diarrhea is prevention. See that the fowls and chicks have a constant supply of grit, oyster shells, and charcoal. In addition to this do not crowd too many birds into a small yard. If chicks or fowls are confined in a yard that has no grass growing, the earth should be turned over occasionally to bury the filth. Prevention is better than cure, every time. For treatment for diarrhea, nothing has been discovered that is satisfactory for the particular ailment known as white diarrhea. The fowl should be separated from the others into a dry, warm, airy pen, and fed carefully on cooked foods. It is a good plan to give a teaspoonful or two of olive oil for a cleaner, so to speak, and then a powder of one-half grain of sodium bicarbonate, and two grains of subnitrate of bismuth in a spoonful of water three times a day.

3. The reason why mash in the morning is detrimental to the laying of a flock so fed, is that they are fed altogether too much. The crop is filled to overcrowding, and the hens lazy, logy, and inactive. Where there is a reason for feeding mash in large quantity it should be fed at night, and dry grain in the morning. The dry grain should be fed so that the hens are constantly scratching for it. If wet mash is fed in the morning, the quantity should be so small that the hens are still hungry and will scratch for grain.

Largest Eggs. (G. F.)—"Which lay the largest eggs—Light Brahmas, White Plymouth Rocks, S. C. Black Minorcas or White Leghorns? Which lay the smoothest?"

Replying to your communication would say that Black Minorcas probably lay the largest of any variety which lay white eggs. Between Light Brahmas and White Plymouth Rocks, my opinion is that White Plymouth Rocks lay larger eggs on an average than Light Brahmas, though not quite as dark in color. I cannot say that there is any difference in the smoothness of the eggs of any variety. A hen in perfectly normal condition would lay a very smooth egg, no matter what breed she is.

How Many Pullets to a Two Year Old Cock? (S. J.)—"Will you kindly answer this in your next issue? Is it all right to breed pullets to a two year old cock? How many should be in a pen?"

There is not the slightest objection to breeding a two year old male with pullets. The number of females depends upon several things—the vigor of the male, breed, extent of run, etc. Eight to twelve is the number ordinarily.

Establishing a Barred Leghorn. (P. V. C.)—"What would be the quickest and surest method to produce a breed having Barred Plymouth Rock color, but shape and all breed characteristics of the Leghorn family? In fact a 'Barred Leghorn.' Size would be a compromise,—also single comb."

The work which you outline is but experimental at the best and more or less of a guesswork variety. If I felt called upon to undertake such a task I should begin by using a White Leghorn male on some medium colored Barred Plymouth Rock hens of the pullet line. The next year I should select a female from this cross which bore the greatest resemblance to Barred Plymouth Rocks in color, and cross them with Barred Plymouth Rock males of rather dark or strong color. After you have color well established there will be little difficulty in regulating the size as you elect.

The Boston Show.

It is evident that the Boston show is out for business this year. In a letter from Mr. Roberts we learn that the association has secured room at 30 Broad street, Boston, where an office will be maintained from now until after the show, and in all probability will be continued throughout the year. The work of the association has always been done at the home of the secretary, but the detail of the show has grown to such proportions that the work requires a trained force for the greater part of the year. All communications in relation to the show should be addressed to the Boston Poultry Association, 30 Broad street, Boston, to insure prompt attention. It is the intention to divide the work of the show between special committees this year. There will be a committee on poultry, pigeons, pet stock, and cats. Each department will be entrusted to a committee of fanciers, and this should broaden the scope of the show. The practical end of the show is without question the best in the country, and plans are being formulated to extend the show in this direction. The premium lists will be issued earlier than usual this year, and specialty clubs who desire to offer specials, or fanciers who desire to have the classification changed, should write immediately. Premium lists will be mailed to every one who received one last year. If you did not get one send your address today to the Boston office, and one will be mailed as soon as ready.

Scientific Rat Exterminator

NOT A POISON

The Pasteur Vaccine Co. Rat Virus is distributed on bait and causes a contagious and mortal disease characteristic to rodents. Both the virus and disease are harmless to domestic animals, pets, game, poultry and man. No odors. Mousalut-Gelatin Culture \$1 and 75c tube. Ratite-Bouillon \$1.50, \$1, 75c bottle. If not obtainable from your dealer order of us.

PASTEUR VACCINE CO., Ltd.

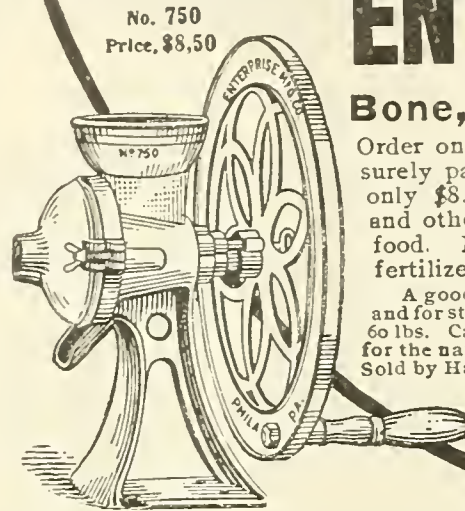
Sole U.S. Commission: 100 West 1st Street, Paris, Biological Products. New York 366-S W. 11th St. Chicago 323 Dearborn St. ADDRESS DEPT. D

Write for the "Enterprising Housekeeper,"

a book of 200 valuable Recipes and Kitchen Helps. Sent Free.

More Eggs—More Money

The increased production of eggs from a very small flock of poultry will soon pay for an Enterprise Bone, Shell and Corn Mill. Cracked corn, ground bone, oyster and other shells, etc., are important items of egg-making material and must be furnished in winter to secure an abundance of high-priced eggs. They can be furnished at lowest cost by the use of an



ENTERPRISE

Bone, Shell and Corn Mill

Order one early in the season, and the hens will surely pay for it. The mill shown in cut costs only \$8.50. Will grind corn, dry bones, oyster and other shells, etc., making valuable poultry food. May be used for making bone meal fertilizer.

A good all-round mill for farmers and poultrymen, and for strength and durability is unexcelled. Weight 60 lbs. Capacity, 1½ bushels of corn per hour. Look for the name "Enterprise" on the machine you buy. Sold by Hardware and General Stores, etc.

THE ENTERPRISE MFG. CO. OF PA.,

236 Dauphin St., Philadelphia, Pa.

We want our pay



BUT NOT UNTIL YOU SAY. "Here is the dollar; you deserve it," not until we have earned it, not until you are willing to send it to us, not until you are satisfied to pay it, not until we have proven to you that we have what we claim, not until Vitae-Ore has done for you what you want it to do for you. Until then, you pay us nothing. After that, you will be willing to pay, glad to pay, as hundreds of the readers of this paper, men and women, have been willing and glad to pay.

YOU ARE TO BE THE JUDGE.

If you can say that we and Vitae-Ore have earned the \$1, we want our pay, as we say at the top, but not otherwise.

How can you refuse to give this remedy a trial on the terms of such a liberal offer? If you need medicinal treatment of any kind, if you are sick and ailing, if anyone in your family is ailing, poorly, worn-out, sickly, it is actually a sin and a shame if you do not send for Vitae-Ore upon the terms of this thirty day trial offer. Read the offer! Send for the medicine! Do it today! Each day lost makes a case older, more obstinate and hurts you more.

You Don't Pay A Cent Unless It Benefits.

OUR TRIAL OFFER

If You Are Sick

We want to send you a full sized \$1.00 package of Vitae-Ore, enough for 30 days' continuous treatment, by mail, postpaid, and we want to send it to you on 30 days' trial. We don't want a penny—we just ask you to try it, just want a letter from you asking for it, and will be glad to send it to you. We take absolutely all the risk—we take all the chances. You don't risk a penny! All we ask is that you use V.-O. for 30 days and pay us \$1.00 if it has helped you. If you are satisfied that it has done you more than \$1.00 worth of positive, actual, visible good. Otherwise you pay nothing, we ask nothing, we want nothing. Can you not spare 100 minutes during the next 30 days to try it? Can you not give 5 minutes to write for it, 5 minutes to properly prepare it upon its arrival, and 3 minutes each day for 30 days to use it? That is all it takes. Cannot you give 100 minutes time if it means new health, new strength, new blood, new force, new energy, vigor, life and happiness? You are to be the judge. We are satisfied with your decision, are perfectly willing to trust to your honor and your judgment, as to whether or not V.-O. has benefited you. Read what V.-O. is, and write today for a dollar package on this most liberal trial offer.

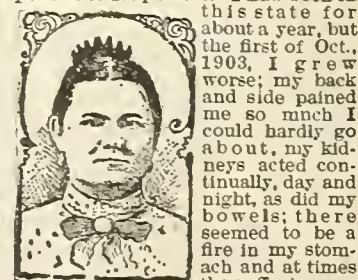
WHAT VITAE-ORE IS.

Vitae-Ore is a mineral remedy, a combination of substances from which many world's noted curative springs derive medicinal power and healing virtue. These properties of the springs come from the natural deposits of mineral in the earth through which water forces its way, only a very small proportion of the medicinal substances in these mineral deposits being thus taken up by the liquid. Vitae-Ore consists of compounds of Iron, Sulphur and Magnesium, elements which are among the chief curative agents in nearly every healing mineral spring, and are necessary for the creation and retention of health. One package of this mineral substance, mixed with a quart of water, equals in medicinal strength and curative, healing value, many gallons of the world's powerful mineral waters, drunk fresh at the springs.

KIDNEY AND BOWEL DISORDERS

Also Rheumatism, Stomach and Female Troubles.

My Kidneys were badly affected, my Bowels were out of order and my Stomach was in such a bad condition that I could not eat anything without its almost killing me. I also had Rheumatism and had gone down from 225 pounds to 175 pounds. I had been in



this state for about a year, but the first of Oct., 1903, I grew worse; my back and side pained me so much I could hardly go about, my kidneys acted continually, day and night, as did my bowels; there seemed to be a fire in my stomach and at times the suffering was so great it seemed I could not live. I took everything I knew of, including several kinds of patent medicines, but none cured me. My periods lasted from two to three weeks, and no one but a woman can know what I suffered. In February, 1904, I saw the Vitae-Ore advertisement, and as I could try the medicine without any risk to me, I sent for a package. It helped me right from the start. I kept on using it and today I am sound and well because of it.

MRS. J. B. MAHAFFEY, Cumby, Tex.

THOUSANDS OF PEOPLE

In all parts of the United States have testified to the efficacy of Vitae-Ore in relieving and curing Rheumatism, Kidney, Bladder and Liver Diseases, Dropsy, Stomach Disorders, Female Ailments, Functional Heart Trouble, Catarrh of any part, Nervous Prostration, Anemia, Sores, Ulcers, and worn out conditions. Send today for a dollar package on trial. Address,

F K Dept. THEO. NOEL CO., VITAE-ORE BLDG. CHICAGO, ILL.

Poultry.

Essay by ALEX. W. ARNETT, Sixth Grade, Fredericktown, Mo., Public School.

I AM a boy twelve years old, and live at Fredericktown, Mo. I had never thought much about poultry until the Missouri Pacific Railway Company sent out two cars with fine poultry and poultry appliances, such as the latest improved incubators, bone cutters, clover cutters, and a stuffing machine which forces chickens to eat more than they would of their own accord, and makes them fatten quicker.

These cars were at this place Oct. 18, 1906, and also Messrs. Steinmesch, Washburn, Lewelling, and Stinson gave some valuable talks on poultry raising. There is a greater demand for eggs and fowls now than there ever was. The money paid for chickens and eggs in 1904 in Missouri was \$31,000,000, and in 1905 a little over \$39,000,000. If you have a flock of fifty hens you ought to be able to raise 250 chickens in a season. Scrub hens will weigh $4\frac{1}{2}$ pounds at least, and 250 chickens at $4\frac{1}{2}$ pounds each would be 1,125 pounds—as much as a two year old steer would weigh, and for the meat of the hen you can get three times the money that you would get for the steer, and the meat is good for table use, and also the eggs are sold for a good price, because the people have to have eggs for making cakes, cookies, eustard pies, corn bread, and many othersavory dishes. As a nutritious food eggs are fast taking the place of meats, and as for receptions, Thanksgiving, Christmas, weddings, and other noted dinners there would be nothing missed as much as eggs. The goose should not be kept up in a small place like the hen, but the goose needs a larger territory to exercise in. The goose egg is larger than the hen egg, but for myself I think it is not as good as the hen egg.

To make the chickens do well you must give them good fresh water at least once a day, but do not put water with their food. Feed them good and regular, but do not feed them too much overheating and fat-

tening foods, such as corn, oats, barley, and hemp, or it may cause soft shelled eggs; and do not feed them all they can eat early in the morning, but make them scratch for it more. The grain should be chopped up and mixed before feeding the chickens, and the chickens want plenty of ground bone. The young chickens that have just been taken from the nest and the older chickens should have sand to eat. You should keep a good stock of chickens. Give them good nests, and a few tobacco stems put in the nest will keep most of insects from breeding. The chickens will do well anywhere except in the swamp. The louse is the worst enemy of the hen. It belongs to the blood sucker class. The heat of the hen's body should be 103 degrees, but when the lice get on a hen in such great numbers she does not eat much; she stands around and does not get out with the other chickens; she walks wobbly, and gets colder, and then she dies, and the lice leave her and get on another hen. A hen should have a chance to get a dust bath whenever she wants one. The louse breathes the dust in its body, and it generally kills it. A good chicken house can be built without much cost, just so it shelters the chickens and keeps them warm. There should be a window on the south side of the house about a foot from the ground, and under the window put a box with dust so the hen can bathe in it. When I am grown I think I shall raise chickens, because it pays, and I believe I would enjoy it.

[The above essay comes to us through the courtesy of the Industrial Commissioner of the Missouri Pacific Railway. We consider it a very good production as a twelve year old boy's report of what he learned on a visit to the poultry demonstration train sent over the lines of the road mentioned some months ago.—Ed. F.-P.]

Co-operation Among Poultrymen.

WE often have poultrymen write or speak to us of the benefits of co-operation in buying supplies and selling produce. Nearly always the subject is brought up by someone who has been impressed by the possibilities of gain at both ends of the business which they think co-operation offers. To all such we have replied that one of the first requisites to a successful co-operative scheme is a man in whom the people have confidence to do the most of the work, and to do much work without compensation—in a spirit of public service.

Co-operative experiments among poultrymen have nearly always been short lived, but it does not follow that such will always be the case. The latest to come to our notice is one at Hollister, Calif., from an account of which in the *Fanciers' Monthly*, we quote the following:—

"Mr. F. C. Debb, now president of the association, had endeavored to interest our poultrymen in the good work which an association could do, but without success until the present time, when the high cost of feedstuffs with the exactions of the express company aroused them to the need of co-operative action, with the result that at the present writing the association which was organized temporarily July 6th, now has a membership of 62, comprising practically all the shippers in this vicinity.

"Shortly after organization, we requested the leading merchants handling feedstuffs, and the local warehouse company to make us a proposition to furnish all our poultry supplies, making a price at the car and at the warehouse. Only one merchant made us such a proposition, the other merchants combining in a proposition to furnish us supplies, when taken from the car, not less than five tons at net cost prices, the association to be responsible for cash payment on delivery. In quantities less than five tons regular retail prices were to be charged, but they failed to enlist the Hollister Rochdale Company in the combination. This latter corporation has made us a very favorable

proposition which has been accepted as per contract, which I inclose.

"To give an illustration of the direct benefits: We have hereto paid not less than \$3.50 per sack for beef scraps; a car is now on the way which will cost us less than \$2.75 per sack. Another very favorable feature is that in purchasing bran, middlings, etc., we can be governed by the protein content, as shown by analysis, thus getting at bed rock.

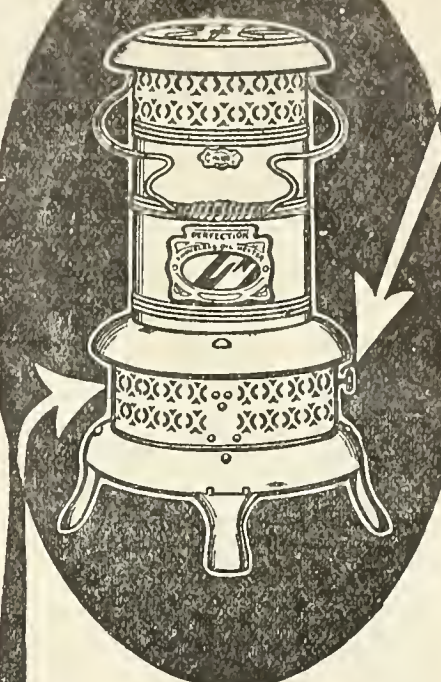
"We sent a representative to the city in an endeavor to secure a concession from the express company which would put the express rate enough lower to make up for the recent addition of 5c. return charge, and drayage charge of 3c. in the city, but thus far have failed to secure such a concession, and at present we are perfecting plans for freight shipments. There is at present tariffs a difference in favor of freight of about 15 cents per case, which would make quite a respectable showing in a year's shipments.

"Another of the results of co-operation is a proposition from a local warehouse man to purchase all our eggs, paying us a stated price based on city quotations, furnishing cases, paying for eggs when received, etc., but as this has not as yet taken concrete form no action has been taken.

"It would seem to be for the advantage of the California poultrymen to form local associations along co-operative lines. This is an age of co-operation, and the capitalist should not have all the benefits of combination. The poultry business in this country has grown to large proportions, and to meet with success it must be governed by the same economic rules that govern other business. To this end the poultrymen of this country are working, and they feel that success is in a fair way to attend their efforts."

Bent's Milk Albumen

To say, when writing advertisers, "SAW AD. IN FARM-POULTRY," will benefit you—please them—and help us.



Turn the Wick

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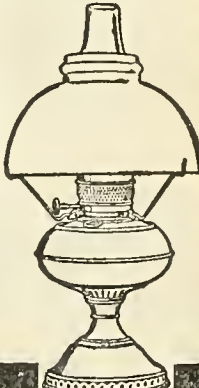
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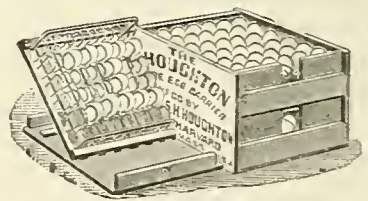
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